C 3, TM 11-605
TO 16-40SCR509-6

TECHNICAL MANUAL

RADIO SETS SCR-509-(*) AND SCR-510-(*)

CHANGES No. 3

DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., *30 March 1954*

TM 11-605, 15 November 1943, is changed as follows:

8.1. Antijamming Procedure

(Added)

If reception is jammed by an enemy signal, promptly notify the immediate superior officer. Because Radio Receiver and Transmitter BC-620 has no tuning controls, the antijamming measures the operator may take are necessarily limited. In many cases a usable signal may be received through enemy jamming interference if the correct procedure is followed. *Do not* allow the radio station to close down because of enemy jamming. Continue to operate as well as possible. In this way the enemy has no way of determining how effective his jamming is. Follow the operational procedure given in *a* through *f* below.

a. Advance the VOLUME control setting. It may be possible to saturate the speaker or headset while permitting the desired signal to come through.

b. Try orienting the whip antenna at various angles. This may favor the polarization of the desired signal.

c. Locate the radio set where the antenna and the source of the jamming signal are separated by a truck, tree, tank, jeep, or hill. This may greatly reduce the strength of the jamming signal.

d. If the steps in *a* through *c* above do not provide a satisfactory signal, request a change of frequency and call signal.

e. If the jamming is so complete and effective that alternate frequencies do not permit communication by radio, use some other method to get the message through.

f. Continue to operate. Do not let the enemy know his jamming is effective. This keeps the jamming equipment tied down to what the enemy believes is an active frequency.

34. Maintenance Parts List for Radio Set SCR-509-(*)

Rescinded

AF Olmsted AFB, Pa., 23 Jul 58 780 REPRINT

BY ORDER OF THE SECRETARY OF THE ARMY:

M. B. RIDGWAY,
General, United States Army,
Chief of Staff.

OFFICIAL:

WM. E. BERGIN,
Major General, United States Army,
The Adjutant General.

DISTRIBUTION:

Active Army:

Tech Svc (1); Tech Svc Bd (1); AFF Bd (ea. Svc Test Sec) (1); AFF (5); AA Comd (2); OS Maj Comd (5); Base Comd (5); MDW (2); Log Comd (5); A (5); CHQ (2); FT (2); Sch (5) except 11 (25); Gen Dep (2); Dep 11 (20) except Sig Sec, Gen Dep (10); Tng Div (2); POE (2); OS SUP Agencies (2); Lab 11 (5); Mil Dist (1); Field Maint Shops 11 (3); T/O & E: 5-500A AA-AC; 11-107; 11-127; 11-128; 11-500A, KA, KB, KC, RA-RR: 11-587; 11-592; 11-597 (2).

NG: Same as Active Army except one copy for each unit.

USAR: None.

For explanation of distribution formula, see SR 310-90-1.

U. S. GOVERNMENT PRINTING OFFICE: 1954

T. O. 31R2-3SCR-171

TECHNICAL MANUAL

RADIO SETS SCR-509-(*) AND SCR-510-(*)

CHANGES No. 2

DEPARTMENT OF THE ARMY
WASHINGTON 25, D. C., *24 November 1952*

TM 11-605, 15 November 1943, is changed as follows:

Section I. DESCRIPTION

Note. (Added) Power Supply Unit PE-120-A is changed to Power Supply Unit PE-120-(*) wherever it appears in this manual.

1. General

This technical manual * * * the *radio set.* Throughout this manual Radio Receiver and Transmitter BC-620-(*) refers to Radio Receiver and Transmitter BC-620-A, **-B, -F, -G, -H, and -J**; Mounting FT-250-(*) refers to Mountings FT-250-A, FT-250-B, FT-250-C, FT-250-E, FT-250-F, FT-250-H, and FT-250-J; Case CS-79-(*) refers to Cases CS-79-A, CS-79-B, CS-79-C, CS-79-D, CS-79-E, CS-79-J, CS-79-K, CS-79-L, and CS-79-M; Mounting FT-317-(*) refers to Mountings FT-317-A, and FT-317-B; Plate Supply Unit PE-97-(*) refers to Plate Supply Units PE-97-A, PE-97-D, and PE-97-F; Antenna AN-45-(*) refers to Antennas AN-45-A, AN-45-B, AN-45-E, AN-45-F, and AN-45-G; Vibrator VB-1-(*) refers to Vibrators VB-1-A and VB-1-B; Vibrator VB-7-(*) refers to Vibrators VB-7-A and VB-7-B; and Capacitor CA-403-(*) refers to Capacitors CA-403-A and CA-403-B. These parts are * * * handset or microphone.

4. Description of Components

* * * * * * *

d. Case CS-79-(*). Case CS-79-(*) contains * * * catch clips provided. **Case CS-79-N is a modification of Case CS-79-(*) and is electrically interchangeable with it. Case CS-79-N is capable of withstanding heavy rains. The following mechanical improvements have been incorporated. The cover is easily removable. Five catch clips have been added to hold down the cover securely to the gasket. The connector cable has been replaced by a receptacle mounted on the recessed portion of the front panel (fig. 3.1).**

* * * * * * *

h. (Superseded). *Plate Supply Unit PE-97-*(*) *and Power Supply Unit PE-120-*(*).

(1) Plate Supply Unit PE–97–(*) (issued only with Radio Sets SCR–510–A and SCR–510–B) is a vibrator-type power supply designed for connection to either a 6-volt or a 12-volt vehicular battery. Hooks and catch clips are provided for mounting the radio receiver and transmitter on top of, and securing them to, Plate Supply Unit PE–97–(*); the entire assembly may in turn be fastened to shock Mounting FT–250–(*) (fig. 2). This unit also may be mounted separately by using Mounting FT–317–(*). The plate supply is contained in a case with space provided for carrying Handset TS–13–(*); a coil of insulated Wire W–126, extension Cord CD–509; and also a spare Fuse FU–38, Vibrator VB–1–(*), and electrolytic Capacitor CA–403–(*). The vibrator and capacitor are of the plug-in type (fig. 5) for quick and easy replacement.

(2) The inside cover of the power pack of Plate Supply Unit PE–97–(*) has a label which shows the correct change-over link connections that are required to adapt the unit for operation from either a 6-volt or a 12-volt vehicular battery (fig. 5).

(3) Power Supply Unit PE–120–(*) is a vibrator-type power supply, designed for connection to 6-volt, 12-volt, or 24-volt vehicular batteries. Hooks and catch clips are provided on the power supply housing so that Radio Receiver and Transmitter BC–620–(*) can be mounted on top of, and secured to, Power Supply Unit PE–120–(*) or Mounting FT–317–(*). Power Supply Unit PE–120–(*) is contained in a metal case with space provided for a spare vibrator and spare fuses. The vibrators are of the plug-in type for quick and easy replacement.

(4) Modification work order MWO SIG 11–605–7 covers the modification of Radio Receiver and Transmitters BC–620–A, –B, –F, and –G and Plate Supply Units PE–97–A and –D to provide improved filament voltage regulation. Radio Receiver and Transmitters BC–620–H and –J are not covered by this modification work order, since they were procured after its publication, nor do they contain the features of the modification. Therefore, the BC–620–H and BC–620–J are not to be used with the PE–97–(*). Instead, the BC–620–H and BC–620–J are to be used with Power Supply Unit PE–120–(*), which has self-contained filament voltage regulation. Power Supply Unit PE–120–(*) may be used with all models of the BC–620–(*). Power Supply Units PE–120–A, –B, and –C are all essentially the same and are interchangeable as units.

(5) Externally, Power Supply Units PE–120–B and –C differ slightly from Power Supply Unit PE–120–A in appearance and in the manner in which the cover is secured to the case (fig. 3.1). The case cover for Power Supply Unit PE–120–B or –C is secured to the case with spring-loaded catches and is completely removable; the case cover for Power Supply Unit PE–120–A is hinged to the case and is not detachable. The eight-pin socket connector, SO2, is mounted in a recess in the side of the case of Power Supply Units PE–120–B and –C, instead of being connected to a cable extension as in Power Supply Unit PE–120–A.

(6) Functionally, Power Supply Unit PE–120–B or –C is interchangeable as a unit with Power Supply Unit PE–120–A. Because of the difference in the mounting of socket connector SO2, however, the interior chassis, which mounts the components of Power Supply Units PE–120–B and –C, cannot be installed in the case designed for Power Supply Unit PE–120–A, and the chassis of Power Supply Unit PE–120–A cannot be installed in the cases designed for Power Supply Units PE–120–B and –C.

(7) The types of all the resistors and some of the capacitors used in Power Supply Unit PE–120–C differ from the corresponding ones used on Power Supply Unit PE–120–A. All the resistors used in Power Supply Unit PE–120–C have been relocated (fig. 11.2). In Power Supply Unit PE–120–C, secondary buffer capacitor C5 has been changed from 5,000 $\mu\mu$f to 6,000 $\mu\mu$f, and resistors R8 and R9 have been added in the receiver filament circuit. These minor differences do not alter the over-all operation of the unit.

i. (Superseded). *Radio Receiver and Transmitter BC–620–*(*).

(1) The receiver and transmitter are on one chassis base. A channel switch is provided on the front panel of the unit to permit rapid changing to either of the two preset frequencies that are controlled by plug-in crystals.

(2) Clips are provided to fasten the receiver and transmitter unit to battery Case CS–79–(*), Plate Supply Unit PE–97–(*), Power Supply Unit PE–120–(*), or Mounting FT–250–(*).

(3) In Radio Receiver and Transmitters BC–620–G, –J, and –K, the output transformer has been changed to provide an extra impedance-matching tap to accommodate a 250-ohm load in addition to the 4,000-ohm load. A label located on the under side of the chassis indicates the manner in which the change of impedance is made. A metal tag is mounted near the

phone jack to indicate the impedance connection at the time the set left the factory. All impedance changes must be accompanied by a corresponding reversal of the tag.

(4) The front panel of Radio Receiver and Transmitters BC–620–H, –J, and –K has been weatherproofed as follows:

(*a*) Hold-down catch clips at sides of front panel have been enlarged to distribute evenly the pressure exerted on the housing by the front panel.

(*b*) The indicating meter has been weatherproofed by the addition of a rubber gasket, a Plexiglas gasket, and a steel reinforcing backplate between the front panel and the meter. To replace the meter, remove the three nuts at the rear of the meter rim. The metering zero adjustment has been weatherproofed by the insertion of a bushing with a sealing plug to cover the adjustment hole. To zero-set the meter, unscrew the plug and proceed as usual.

(*c*) The shafts of the meter control switch, channel switch, and volume control have been weatherproofed further by substituting water-pump packing for the velutex gaskets. This packing is wrapped securely around the shaft and drawn tightly by means of a packing gland.

(5) Modification work order MWO SIG 11–605–2 covers modification of the BC–620–(*) metering socket to permit presetting the tuning controls as an aid in tuning the transmitter. Modification work order MWO SIG 11–605–3 covers modification of the power cable leading from the BC–620–(*) to the power supply, to prevent power cable failure.

(6) Modification work order MWO SIG 11–605–7 covers modification of Radio Reciever and Transmitters BC–620–A, –B, –F, and –G and Plate Supply Units PE–97–A and –D to provide improved filament voltage regulation. Radio Rereceiver and Transmitters BC–620–H and –J are not covered by this modification work order, since they were procured after its publication, nor do they contain the features of the modification. Therefore, the BC–620–H and BC–620–J must not be used with the PE–97–(*). Instead, the BC–620–H and BC–620–J must be used with Power Supply Unit PE–120–(*), which has self-contained filament voltage regulation. Power Supply Unit PE–120–(*) may be used with all models of the BC–620–(*).

(7) Modification work under MWO SIG 11–605–8 covers modification of the SCR–509–(*) and the SCR–510–(*). Its purpose is to eliminate breakage of draw-pull catches and distortion of cases, by installing new draw-pull catches of increased

mechanical strength. Modification work order MWO SIG 11–605–10 covers modification of Radio Receiver and Transmitter BC–620–(*). Its purpose is to replace those fixed capacitors that have proved unsatisfactory because of moisture absorption.

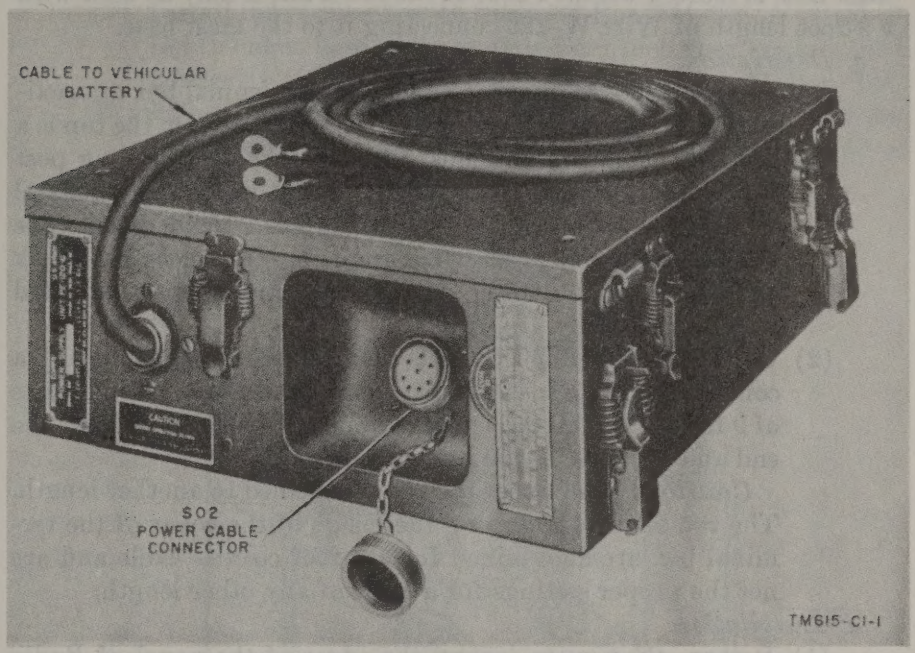


Figure 3.1 (Added) *Power Supply Unit PE–120–C, exterior view.*

6.1 Terminal Box TM–206–A

Added

a. General. Satisfactory operations will result only if this equipment is used with one of the following antenna systems:

(1) Mast Base AB–15/GR, Mast Sections MS–117 and MS–118, and lead-in Wire W–128 (2 feet, 0 inch).

(2) Mast Base MP–48 or MP–48–A, Mast Sections MS–52 and MS–53, and lead-in Wire W–128 (2 feet, 0 inch).

(3) Mast Base AB–15/GR, Mast Sections MS–116, MS–117, and MS–118, and Cord CG–67/MRQ–2 (9 feet, 0 inch).

(4) Mast Base MP–48 or MP–48–A, Mast Sections MS–51, MS–52, and MS–53, and CORD CD–1297 (9 feet, 0 inch).

(5) Antenna AN–45–(*), mounted directly on terminal Box TM–206–A.

b. Purpose. Box TM–206–A is a waterproof terminal box designed to replace the antenna mounting block assembly mounted at the rear of Radio Receiver and Transmitter BC–620–(*). It is to be used with

Radio Sets SCR–509–(*) and SCR–510–(*) in installations where the radio set is located more than 2 feet from the mast base. In this type of installation, with Mast Base AB–15/GR, a 9-foot length of coaxial cable Cord CG–67/MRQ–2 is used. Mast Base MP–48 or MP–48–A may be used with a 9-foot length of coaxial cable Cord CD–1297. It also may be used as a mount for Antenna AN–45–(*), or, when the mast base is located within 1 foot of the radio set, it may be used with a 2-foot length of Wire W–128 connecting it to the mast base.

c. Description.

(1) Box TM–206–A (figs. 6.1 and 6.2) is a terminal box approximately 2¾ inches square and 1½ inches deep. On the top is a post for mounting Antenna AN–45–(*) and a binding post for connection of Wire W–128. On the bottom is a coaxial cable connector and a right-angle adapter. Inside the box are a change-over link and a capacitor connected between the link and the coaxial fitting. An instruction label is mounted inside the cover.

(2) Cord CG–67/MRQ–2 consists of 9 feet of coaxial cable with a connector Plug PL–259 on each end. Cord CD–1297 consists of 9 feet of coaxial cable with a plug AN–3106–14–3ST on one end and a Plug PL–259 on the other.

Caution: Do not cut the cord furnished to another length. The tap settings shown on the inside of the cover of the terminal box are determined for a 9-foot coaxial cable and are not the proper settings for a cable of any other length.

d. Installation.

(1) Remove the screws around the edges of the panel of Radio Receiver and Transmitter BC–620–(*) or unsnap the catches and slide out the chassis.

(2) Remove the six double nuts and lockwashers from within the back of the case and remove the antenna junction box and mounting block.

(3) Remove the four screws that fasten the cover of the terminal box. Remove the lockwashers and nuts from the six screws on the back of the terminal box. Insert the screws into the holes on the case of the radio set and fasten securely within the case with lockwashers and nuts.

(4) Slide the chassis back into the case and fasten the panel screws or catches.

(5) If the terminal box is to be used with coaxial cable connection, set the change-over link as shown in figure 6.2. If the box is to be used with Antenna AN–45–(*) or with 2 feet of lead-in wire to the mast base, set the change-over link as shown in

figure 6.1. Replace the cover of the terminal box and fasten with the four screws.

(6) If the coaxial cable is to be connected vertically, remove the right-angle adapter from the coaxial cable connector. If the coaxial cable is to be connected horizontally, mount the right-angle adapter in the most convenient position.

(7) Install the radio set, with terminal Box TM–206–A attached, and the mast base in the vehicle for which they are intended. Connect Cord CG–67/MRQ–2 between terminal Box TM–206–A and Mast Base AB–15/GR, or Cord CD–1297 between terminal Box TM–206–A and Mast Base MP–48 or MP–48–A.

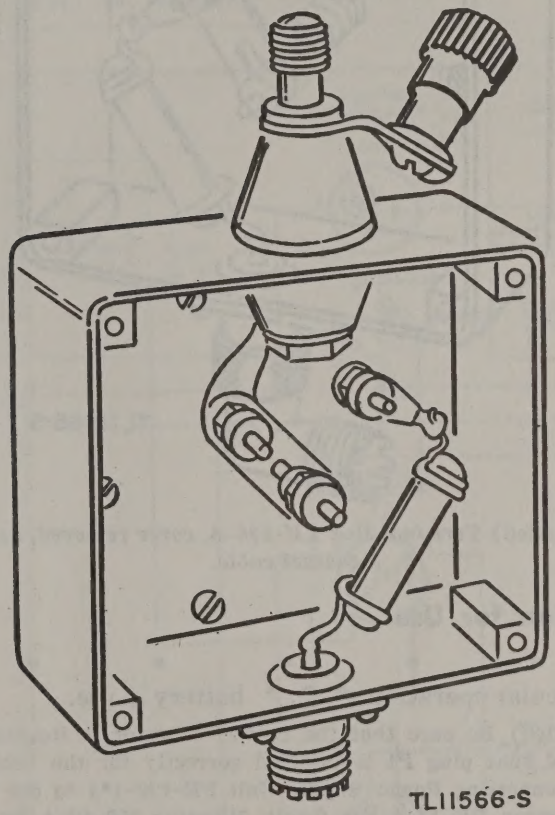


Figure 6.1 (Added) *Terminal Box TM–206–A, cover removed, connection for Antenna AN–45–(*).*

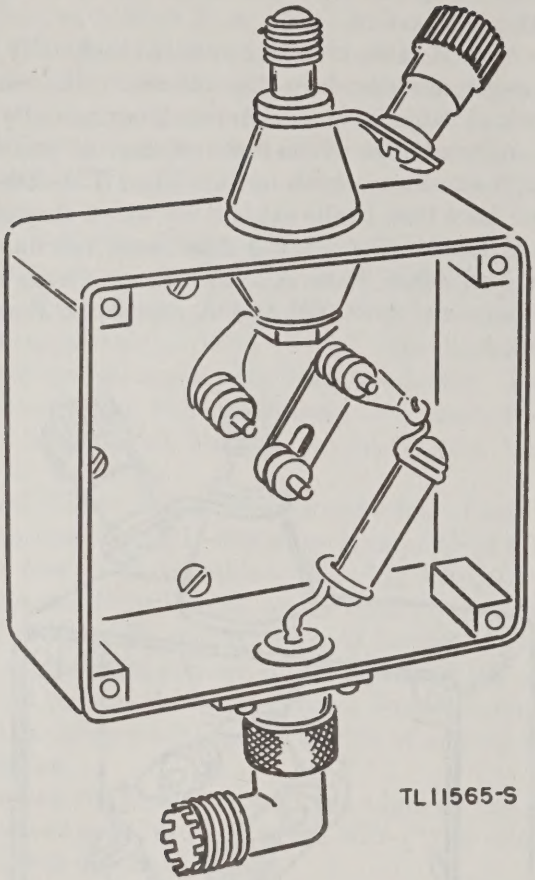


Figure 6.2 (Added) *Terminal Box TM-206-A, cover removed, connection for coaxial cable.*

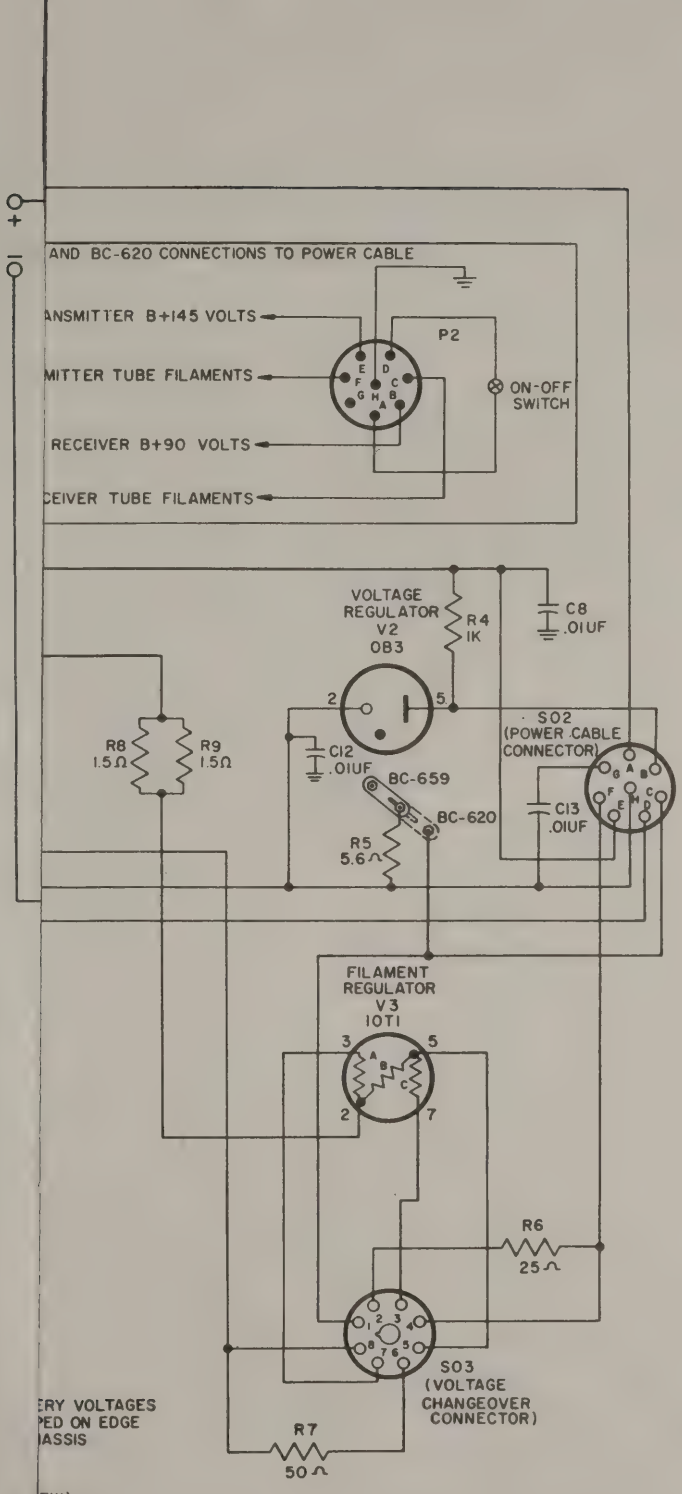
7. Preparation for Use

* * * * * * *

c. For vehicular operation * * * battery in use.

Note. (Added) Be sure that the correct vibrator is inserted in vibrator socket SO1, and that plug P1 is inserted correctly for the vehicular battery source before connecting Power Supply Unit PE-120-(*) to the vehicular battery. Use Vibrator VB-12-A for 6-volt, Vibrator VB-13-A for 12-volt, and Vibrator VB-11-A for 24-volt operation.

* * * * * * *


+
−
AND BC-620 CONNECTIONS TO POWER CABLE
ANSMITTER B+145 VOLTS
MITTER TUBE FILAMENTS
RECEIVER B+90 VOLTS
CEIVER TUBE FILAMENTS
P2
ON-OFF SWITCH
VOLTAGE REGULATOR V2 0B3
R4 1K
C8 .01UF
R8 1.5Ω
R9 1.5Ω
C12 .01UF
BC-659
BC-620
R5 5.6Ω
S02 (POWER CABLE CONNECTOR)
C13 .01UF
FILAMENT REGULATOR V3 10T1
R6 25Ω
S03 (VOLTAGE CHANGEOVER CONNECTOR)
R7 50Ω
ERY VOLTAGES
PED ON EDGE
ASSIS
EW)
03

TM615-C1-3

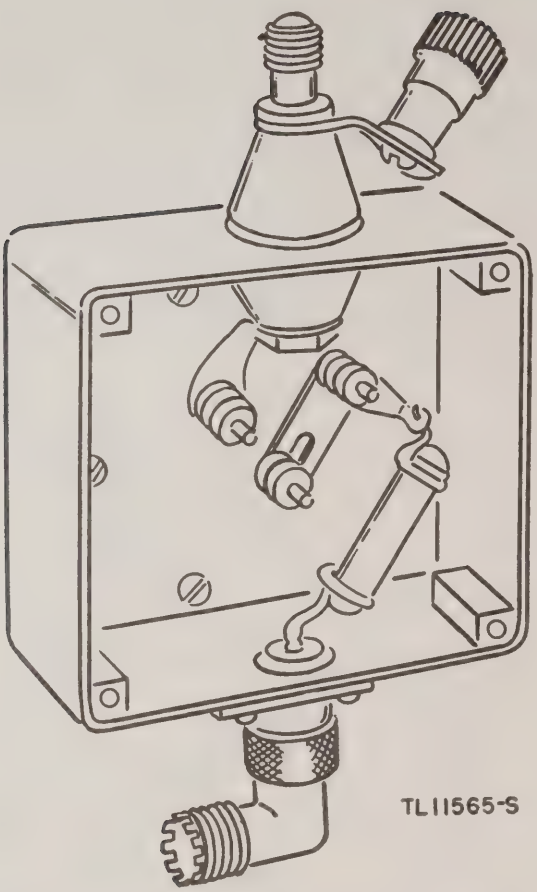


Figure 6.2 (Added) *Terminal Box TM–206–A, cover removed, connection for coaxial cable.*

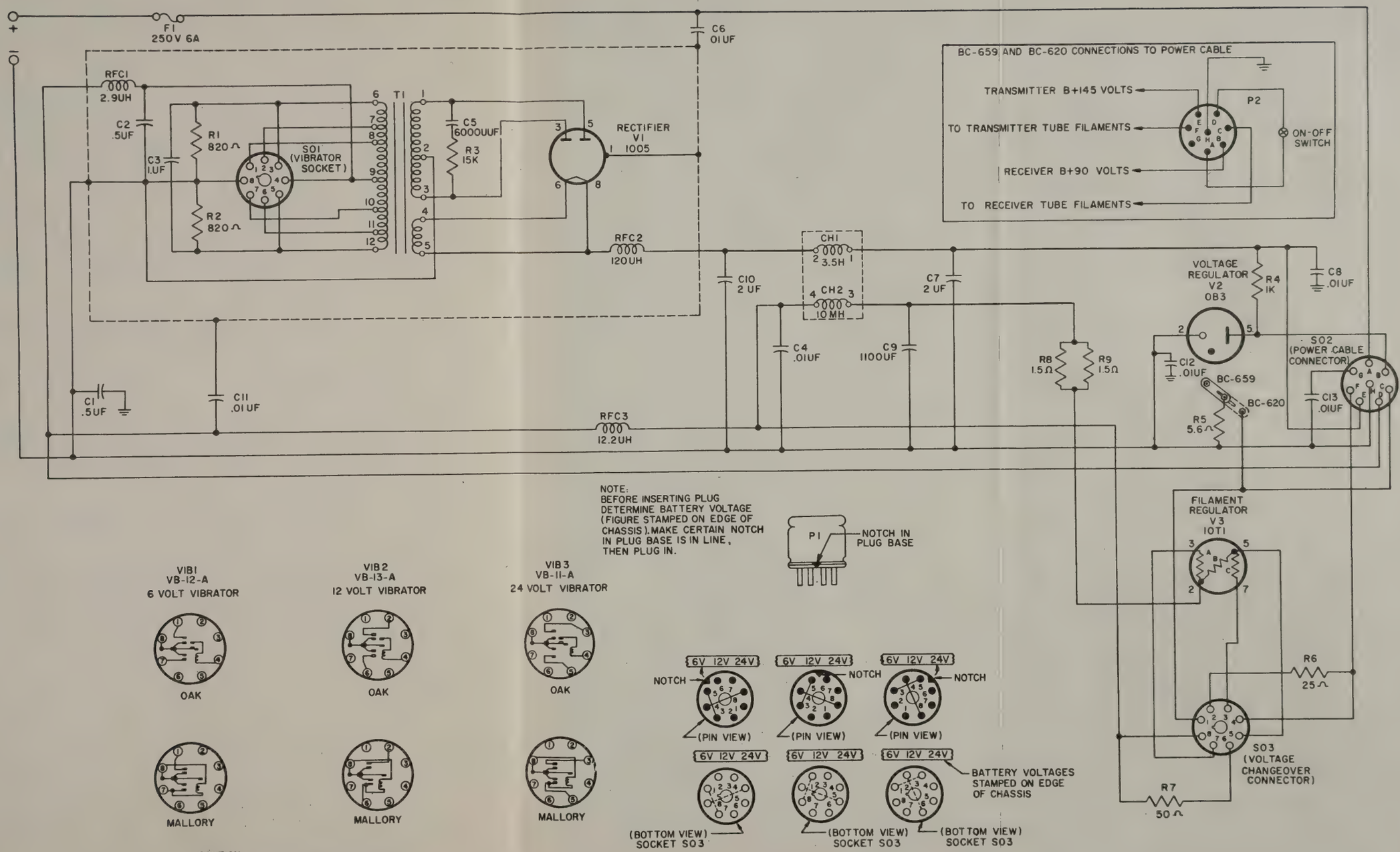
7. Preparation for Use

* * * * * * *

c. For vehicular operation * * * battery in use.

Note. (Added) Be sure that the correct vibrator is inserted in vibrator socket SO1, and that plug P1 is inserted correctly for the vehicular battery source before connecting Power Supply Unit PE–120–(*) to the vehicular battery. Use Vibrator VB–12–A for 6-volt, Vibrator VB–13–A for 12-volt, and Vibrator VB–11–A for 24-volt operation.

* * * * * * *



VIB1
VB-12-A
6 VOLT VIBRATOR

OAK

MALLORY

VIB2
VB-13-A
12 VOLT VIBRATOR

OAK

MALLORY

VIB3
VB-11-A
24 VOLT VIBRATOR

OAK

MALLORY

CAUTION-
MAKE CERTAIN THAT CORRECT VIBRATOR
IS USED WITH DESIRED BATTERY VOLTAGE
6V FOR 6V-7.5V BATTERY
12V FOR 12V-15V BATTERY
24V FOR 24V-30V BATTERY

NOTE:
BEFORE INSERTING PLUG
DETERMINE BATTERY VOLTAGE
(FIGURE STAMPED ON EDGE OF
CHASSIS). MAKE CERTAIN NOTCH
IN PLUG BASE IS IN LINE,
THEN PLUG IN.

TM815-CI-3

30. Presetting Procedure Using Adapter M–394

* * * * * * *

c. The following steps * * * the microphone switch.

* * * * * * *

(4) Tune A6 (B6) * * * approximate (chart) setting.

Note (Added) In order to maintain a fine adjustment in steps (3) and (4) above, it is recommended that the probe be inserted in pin jack No. 8 of the metering socket. Observe the meter for a slight dip at the maximum noise peak. The VOLUME control should be turned on fully.

d. The following steps * * * while making adjustments.

(1) Insert probe in * * * on this peak.

Note (Added) If it is difficult to determine the correct dip, remove the first r-f amplifier tube V5 (VT–179) for this step only.

* * * * * * *

31. I-F and Discriminator Alinement

* * * * * * *

d. The following alinement * * * *and Adapter M–394.*

* * * * * * *

(10) Turn set off **(VOLUME control),** set adapter **OFF-ALINE**-switch to OFF and remove 2.88-megacycle crystal. Replace the channel crystals in their proper sockets.

* * * * * * *

33.2. Corrective Measures and Maintenance Hints

* * * * * * *

d. (Added) The vibrator chassis of Power Supply Unit PE–120–(*) is insulated from the main chassis. If the main chassis is removed from the housing, be sure to use the same length screws when replacing it. Longer screws will ground the vibrator chassis to the main chassis.

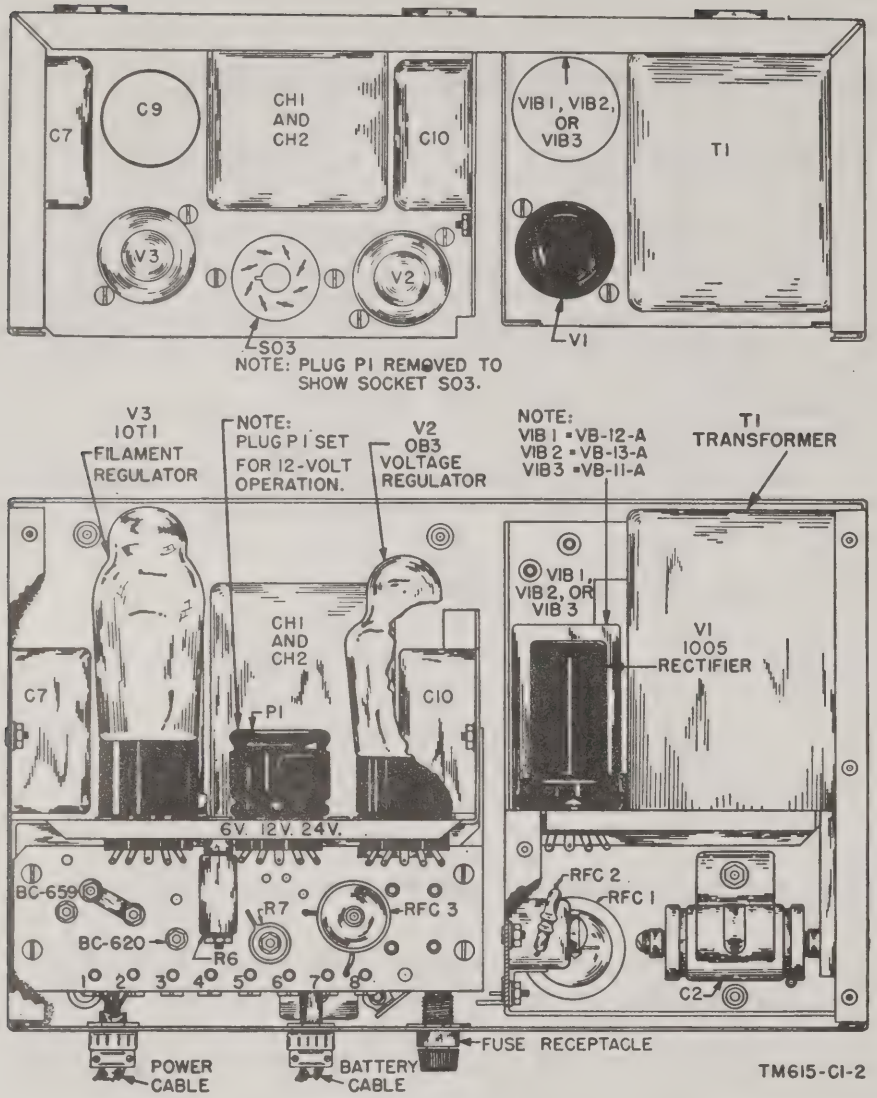
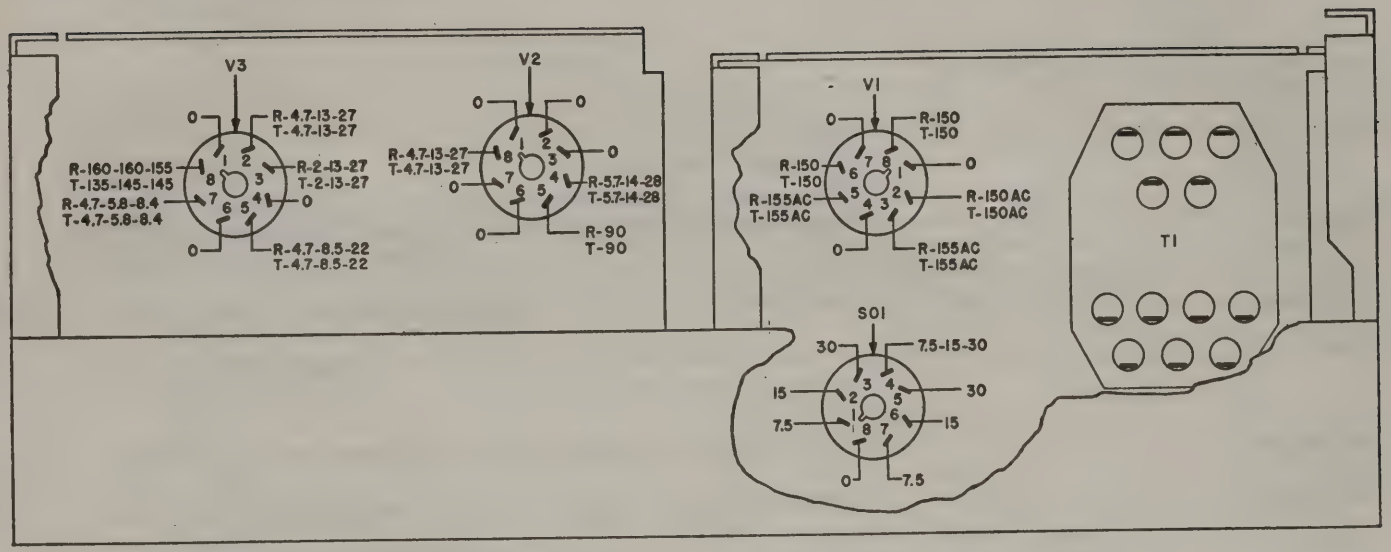


Figure 24.2 (Added) *Power Supply Unit PE-120-C, side and top views with cover removed.*



NOTE: VOLTAGE MEASUREMENTS MADE UNDER THE FOLLOWING CONDITIONS:

1. POWER SUPPLY UNIT PE-120-C CONNECTED TO RADIO RECEIVER AND TRANSMITTER BC-659-( ) WHICH IS KNOWN TO BE IN GOOD OPERATING CONDITION.
2. VOLTAGE INPUT TO POWER SUPPLY UNIT PE-120-C. CAUTION: SEE PAR.27 BEFORE CONNECTING TO VEHICULAR BATTERY. WHERE THREE VALUES ARE GIVEN, THEY ARE FOR 6-, 12-, AND 24-VOLT BATTERY INPUT, RESPECTIVELY. ALL VALUES SHOWN ARE NOMINAL.
3. R=WITH RADIO RECEIVER AND TRANSMITTER BC-659-( ) IN RECEIVE POSITION. T=WITH THE BC-659-( ) IN TRANSMIT POSITION.
4. VOLTAGES MEASURED WITH VACUUM TUBE VOLTMETER. ALL READINGS ARE D-C VOLTS EXCEPT WHERE INDICATED AS AC. ALL VOLTAGES MEASURED BETWEEN POINT INDICATED AND B-(BROWN LEAD).
5. WITH VOLTAGE REGULATOR V2, OB3, WORKING.
6. CURRENT DRAIN WITH 6-VOLT INPUT-3.0 AMPERES IN RECEIVE POSITION, 4.5 AMPERES IN TRANSMIT POSITION; WITH 12-VOLT INPUT-2.0 AMPERES IN RECEIVE POSITION, 2.75 AMPERES IN TRANSMIT POSITION; WITH 24-VOLT INPUT-1.5 AMPERES IN RECEIVE POSITION, 2.0 AMPERES IN TRANSMIT POSITION
7. ALL VALUES SHOWN ARE WITH 7.5-, 15-, AND 30-VOLT INPUT, WHICH SHOULD OCCUR WHEN 6-, 12-, AND 24-VOLT BATTERIES ARE FULLY CHARGED, OR WHEN THE GENERATOR OF VEHICLE IS OPERATING.

TM615-C1-4

Figure 25.2 (Added) *Power Supply Unit PE-120-C, voltage diagram.*

34.2. Maintenance Parts List for Radio Receiver and Transmitter BC–620–(*)

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
*	* * *	* *	*
C9	CAPACITOR: fixed; mica; * * * 300 v d-c (working)		3DA10–78
	CAPACITOR: fixed; ceramic; .005 μf +80%, −20%, 300 v dc working (this capacitor is used in later models of the BC–620–(*), and is interchangeable with the old C9).		3DA5–24
*	* * *	* *	*
C65	CAPACITOR: fixed, styramic paper; .01 μf ±20%, 300 v dc working		3D10–230
*	* * *	* *	*
C68	**CAPACITOR: fixed, molded paper; .005 μf; 300 v dc working**		3DA5–134
*	* * *	* *	*
SW11	SWITCH: same as SW10		
SW14	**SWITCH: slide; Stackpole SS–3 DPDT**		3Z9839
*	* * *	* *	*
T7	TRANSFORMER C–62: output		2Z9662
	TRANSFORMER: a-f output; secondary tapped at 4000 ohms, 250 ohms, and 3 ohms (used in Radio Receiver and Transmitters BC–620–G and –J).		2Z9632.223
*	* * *	* *	*

34.2.1 Identification Table of Parts for Radio Receiver and Transmitter BC–620–H

(Added)

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
	GASKET, meter: neoprene; $2\frac{13}{16}$″ dia o/a; $\frac{3}{32}$″ thk; openings for meter scale and zero reset; 3 mtg holes evenly spaced on 2.437″ dia; Admiral #P616–125.	Weatherproofs meter front	2Z4868.135
	GASKET, rubber: black neoprene; $11\frac{15}{16}$″ lg x $6\frac{9}{16}$″ wd x $\frac{9}{32}$″ thk OD; $11\frac{3}{8}$″ lg x $6\frac{9}{16}$″ wd ID; Galvin #32B49774.		2Z4868.95
	PACKING, fiber: graphite; $\frac{1}{8}$″ dia x 3″ lg; Admiral #999–203–1.	Weatherproofs control shaft	2Z6904–1
	PANEL, front: consists of panel, long catch clips, meter zero reset bushing and gaskets; Admiral #G2039.		2Z6959–18
	PLATE, reinforcing: steel; 18 gage x $2\frac{13}{16}$″ dia o/a; cadmium-plated; 3 mtg holes spaced evenly on 2.437″dia and tapped #3–48 machine screw; openings for meter zero reset and for meter scale; Admiral #202–402.	Reinforces meter window	2Z7093–23
	PLUG ASSEMBLY, weatherproofing: consists of male plug w/$\frac{5}{8}$″–24 thread, $3\frac{1}{2}$″ lg stranded 000 safety chain, spring clip, neoprene gasket, brass retaining washer; Admiral #G2040.		2Z3351–40
R41	RESISTOR, fixed: carbon; 3.3 ohms ±10%; ½ w; $\frac{7}{16}$″ lg x 0.218″ dia; Eire #504.	V4 filament dropping	3Z5993–21
R44	RESISTOR, fixed: carbon; 180 ohms ±10%; ½ w; $\frac{7}{16}$″ lg x 0.218″ dia; RC21AE181K.	V4, filament shunt	3RC21AE181K
R43	RESISTOR, fixed: carbon; 220 ohms ±10%; ½ w; $\frac{7}{16}$″ lg x 0.218″ dia; RC20AE221K.	V3 Filament shunt	3RC20AE221K
	WASHER, cable: hard brass; $1\frac{1}{16}$″ OD x 0.031″ thk x $\frac{3}{4}$″ ID; Admiral #P910–54.	Protects fiber washer	6L50122
	WINDOW, meter: Plexiglas; $2\frac{13}{16}$″ dia o/a x $\frac{1}{16}$″ thk; 3 mtg holes evenly spaced on 2.437″ dia; openings for meter zero reset, $\frac{9}{16}$″ dia; Admiral #952–120.	Weatherproofs meter front	2ZA1352–51

34.3.1 Identification Table of Parts for Case CS–79–N

(Added)

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
	CAP, plug: black rubber; 3/8" cable hole and 1" connector hole; 1 3/8" dia x 1 1/2" lg x 1 1/32" h o/a; Galvin #37A30251.	Insulates connector terminals	2Z7104–27
	CATCH, clip: hold-down type; small; 1 1/2" lg; steel; od finish; Galvin #55A53415.		2Z1923–1
	CLIP, catch; hold-down type; hook-shaped; 7/8" lg x 9/16" wd x 1/4" thk; Galvin #55A53416.		2Z2727–1
	CONNECTOR, female contact: 1 1/2" sq x 1 1/2" d; Amphenol #3102-20–7S.		2Z8678.68
	GASKET, connector: neoprene; 1 9/16" sq x 1/16" thk; 1 1/8" dia hole for connector; 4 mtg holes 1.156" ctr; Admiral #P616–139.	Weather seal between case and connector.	2Z4868.133
	GASKET, panel: neoprene; black; 14 3/32" lg x 11 3/16" wd; Admiral #P616–138.	Water seal between housing and cover.	2Z4868.134

34.5.1 Identification Table for Parts for Power Supply Unit PE–120–B

(Added)

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
	CAP, plug: black rubber; ⅜″ cable hole and 1″ connector hole; 1⅜″ dia x 1½″ lg x 1$\frac{1}{32}$″ h o/a; Galvin #37A30251.	Insulates connector terminals	2Z7104–27
	CATCH, clip: hold-down type; small; 1½″ lg; steel; od finish; Galvin #55A53415.		2Z1923.1
	CLIP, catch: hold-down type; ⅞″ lg x $\frac{9}{16}$″ wd x ¼″ thk; Galvin #55A53416.		2Z2727–1
	CONNECTOR, female contact: 8 cont; 1½″ sq x 1½″ d; Amphenol #3102–20–7S.		2Z8678.68
	GASKET, connector: neoprene; black; 1$\frac{9}{16}$″ sq x $\frac{1}{16}$″ thk; 1¼″ dia hole for connector; 4 mtg holes 1.156″ ctr; Admiral #P616–139.	Weather seal between case and connector.	2Z4868.133
	GASKET, panel: neoprene; black 14$\frac{31}{32}$″ lg x 12″ wd x $\frac{9}{32}$″ thk; hole 14$\frac{9}{32}$″ lg x 11$\frac{5}{16}$″ wd; Admiral #P616–138	Water seal between housing and cover.	2Z4868.134

16

34.5.2 Identification Table of Parts for Power Unit PE–120–C
(Added)

Note. The following is an identification table of parts for Power Supply Unit PE–120–C (Sig C stock No. 3H4496–120). The fact that a part is listed in this table is not sufficient basis for requisitioning the item. Requisitions must cite an authorized basis, such as a specific T/O & E, T/A, SIG 7 & 8, SIG 7–8–10, SIG 10, list of allowances of expendable material, or other authorized supply basis. The Department of the Army Supply Catalog applicable to the equipment covered in this change is SIG 7 PE–120. For an index of available supply catalogs in the Signal portion of the Department of the Army Supply Catalog, see the latest issue of SIG 1.

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
119	BOARD, terminal: bakelite; includes 1 term. and soldering lug.	Used as a tie point for leads	2Z770–1.34
121	BOARD, terminal: laminated bakelite; includes 4 solder-lug type term. 2″ lg x ⅜″ wd x 3/32″ thk.	Provides attachment and transfer points for leads.	2Z9402.112
	BUS BAR: brass; rectangular; solid; ⅞″ lg x 5/16″ wd x 0.05″ thk.	Provides a means of changing the circuit connections so that the power supply unit may be used either with Radio Receiver and Transmitter BC–659 or Radio Receiver and Transmitter BC–620.	2Z558–71
102	CABLE, power: electrical; stranded; two #14 AWG and two #10 AWG cond; synthetic rubber insulated approx 10′ lg o/a; Sig C type #CO–134.	Conducts energy from the battery to the power supply unit.	3E2134
	CABLE, power: electrical; stranded; 8 cond; six #20 AWG and two #14 AWG cond; approx 24″ lg o/a.	Connects the output of the unit to the output receptacle.	2E2139
C9	CAPACITOR, fixed: electrolytic; 1,100 μf; 25 vdcw; JAN type CE41C112F.	Filter for filament supply	3DB1000–4
C1, C2	CAPACITOR, fixed: paper dielectric; 500,000 μμf ±20%; 200 vdcw.	Bypass r-f voltages to ground	3D9000.5–7
C3	CAPACITOR, fixed: paper dielectric; 1.0 μf ±20%; 100 vdcw; JAN type CP54–B1EB105V.	Primary buffer capacitor for the transformer	3DB1.184

C4, C6, C8, C11, C12, C13.	CAPACITOR, fixed: paper dielectric; 10,000 μμf ±20%; 300 vdcw; JAN type CN22A103M.	R-f bypass capacitors	3DA10-447
C5	CAPACITOR, fixed: paper dielectric; 6000 μμf ±10%; 1500 vdcw; JAN type CP28A1EH602K.	Secondary buffer capacitor for the transformer	3DA5-129
C7, C10	CAPACITOR, fixed: paper dielectric; 2.0 μf ±20%; 200 vdcw; JAN type CP53B1FC205V.	Filter capacitors	3DB2.207
RFC1	CHOKE, RF: nominal inductance 2.9 μh ±20% at 1000 cps.	Filters input to the vibrator and the transformer.	3C362-32
RFC2	CHOKE, RF: nominal inductance 120 μh at 1000 cps.	Filters output of the rectifier tube	3C362-33
RFC3	CHOKE, RF: nominal inductance 12.2 μh ±20% at 1000 cps.	Filters input to the receiver filament	3C362-3
CC1, CC2	CLAMP, electrical: aluminum; screw type; 1 5/64" lg o/a.	Secure the input cable and the output lead	2Z1587-284
107	CLAMP, electrical: phosphor bronze, tin-plated; circular spring type; 2" lg o/a.	Secures the vibrator in place when not in use	2Z2642.648
111	CLAMP, electrical: steel; spring type; 1⅞" lg o/a	Grounds the vibrator	2Z2642.648
S02	CONNECTOR, receptacle: 8 female contacts; polarized.	Receptacle for connecting the using equipment to output of the power supply unit.	2Z8678.68
	COVER, electrical connector, threaded cap; aluminum; 1¼" dia x 7/16" thk.	Protects the output receptacle when the receptacle is not in use.	2Z1612
109	FASTENER, catch to case: steel; 1" lg o/a	Large strike for case catch; part of draw-type latch.	6Z1747-49
105	FASTENER, cover to base: draw type latch; steel	Part of the catch clip assembly which secures the cover to the case.	6Z3810-49
106	FASTENER, cover to case; draw type latch; steel	Part of the catch clip for securing the PE-120-C to shock Mounting FT-250.	6Z918-68
	FITTING, conduit: conduit coupling; threaded; ½" lg o/a.	Mounts the clamp securing the battery cable and the output cable.	6Z3421-1

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
F1	FUSE, cartridge: ferrule type; one-time; 6 amp, 250 v; instantaneous; nonindicating.	Protects the unit from damage caused by excessive input.	3Z2606.3
117	FUSEHOLDER: retainer type; accommodates 1 cartridge-type fuse.	Retains the fuse	3Z1939
	INSULATION, sleeving, electrical: flexible; transparent vinylite; 1.375" ID; 3⅝" lg o/a.	Used to cover the electrolytic capacitor	3G2264
122	INSULATOR: washer, bakelite; round, flat; 1½" dia	Used as insulator for the electrolytic capacitor	3G385-63
	INSULATOR: washer, bakelite; round, flat; ½" dia	Insulates r-f choke RFC 1	3G385-64
110	LATCH RETAINER: keeper; spring steel	Secures the latch loop when the latch is not in use.	6Z3810-112
114	LUG, terminal: round tongue end type; copper; accommodates one #10 AWG and one #14 AWG wire.	Solder lug; connects input cable to battery terminals.	3Z12073-44.8
P1	PLUG, voltage changeover: 8 male contacts; octal retainer ring type plug w/marker.	Provides means of connecting circuits so that the equipment will produce the desired output from 6-volt, 12-volt, or 24-volt input.	2Z7118.34
CH1, CH2	REACTOR: sealed; dual sections; 3.5 hy, 75 ma and 0.01 hy, 950 ma.	Filter chokes	3C317-33
R1, R2	RESISTOR, fixed: composition; 820 ohms, ±10%; 1 w; JAN type RC30BF821K.	Buffer resistors for the primary of the transformer.	3RC30BF821K
R3	RESISTOR, fixed: composition; 15,000 ohms ±10%; ½ w; JAN type RC20BF153K.	Buffer resistor for the secondary of the transformer.	3RC20BF153K
R4	RESISTOR, fixed: WW; 1,000 ohms ±5%; 10 w; JAN type RW31.	Dropping resistor	3RW24320
R5	RESISTOR, fixed: WW; 5.6 ohms ±5%; 8 w; JAN type RW30G5R6.	Filament shunting	3RW10802
R6	RESISTOR, fixed: WW; 25 ohms ±5%; 8 w; JAN type RW30G250.	Transmitter filament series resistor	3RW14708

R7	RESISTOR, fixed: WW; 50 ohms ±5%; 8 w; JAN type R–26.	Transmitter filament series resistor	3RW16507
R8, R9	RESISTOR, fixed: WW; 1.5 ohms ±10%; 1 w; type #RU4B1R5K.	Receiver filament dropping resistors	3RU08005
V3	RESISTOR, thermal: ballast tube; octal; Amperite type #10T1.	Ballast tube; used to regulate filament voltages.	3Z6925–3.8
	RING, retainer: AN; connector; aluminum ring, spring steel speed nuts.	Retains output connector S02	2Z7858–291
S01, S03	SOCKET, electron tube: octal; one-piece saddle mtg; 8 contacts; spec JAN–S–28.	Receptacles for vibrator, voltage change-over plug, and rectifier, voltage regulator and filament regulator tubes.	2Z8670.33
	STUFFING TUBE: feed-through type; straight; 1 1/16″ lg o/a.	Protects the battery lead while it passes through the case.	2Z3006–1
T1	TRANSFORMER, power: vibrator; sealed metal case; input, 6 v, 12 v, or 24 v; 4 to 5 amp, 3 to 3.5 amp, 2 to 2.5 amp; output 140 v, 115 cps; 60 ma.	Steps up voltage supplied by interrupter	2Z9625–24
V2	TUBE, electron: diode, gas-filled; JAN type OB3	Voltage regulator tube; maintains voltage constant.	2JOB3
V1	TUBE, electron: dual diode; JAN type 1005	Rectifies the transformer output	2T1005
VIB1	VIBRATOR, nonsynchronous: single reed; input 6 v dc, 4.53 amp; 115-cps output; Sig C type #VB–12( ).	Interrupter used with 6-volt d-c input	3H6712
VIB2	VIBRATOR, nonsynchronous: single reed; input 12 v dc, 3.083 amp; 115-cps output; Sig C type #VB–13-( ).	Interrupter used with 12-volt d-c input	3H6713
VIB3	VIBRATOR, nonsynchronous: single reed; input 24 v dc, 2.15 amp; 115-cps output; Sig C type #VB–11–( ).	Interrupter used with 24-volt d-c input	3H6711

34.13 Identification Table of Parts for Terminal Box TM–206–A

(Added)

Ref symbol	Name of part and description	Function of part	Signal Corps stock No.
	ADAPTER M–359		2Z299–359
	BINDING POST TM–145		3Z245
	CAPACITOR: 39 $\mu\mu$f $\pm$5%; silver mica		3K2039032
	SOCKET SO–239		2Z8799–239
	GASKET: Buna S; 3/32" thk x 2½" x 2¾", with six screw holes and ctr hole 1½" x 1¾".		2Z4867.331
	INSULATOR: molded bakelite; cone-shaped; 1¼" dia at base; ⅝" dia at top; ¾" lg with 0.323 dia hole.		3G1836–18

[AG 300.7 (30 Oct 52)]

By order of the Secretary of the Army:

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U. S. GOVERNMENT PRINTING OFFICE: 1958

TECHNICAL MANUAL

RADIO SETS SCR-509-(*) and SCR-510-(*)

CHANGES No. 1

WAR DEPARTMENT
Washington 25, D. C., 4 December 1944

TM 11-605, 15 November 1943, is changed as follows:

SAFETY NOTICE

THERE IS NO * * * OF THE CHASSIS.

Do not remove the vibrator power pack cover, inside Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A (part of Radio Set SCR-510-(*),) except when the set is turned off or when the cable connector to the radio receiver and transmitter is disconnected. This removes the * * * vibrator power pack.

*These changes supersede TB 11-605-1, TB 11-605-2, and TB 11-605-3.

DESTRUCTION NOTICE

* * * * * * *

WHAT 1. Smash—

a. Radio Receiver and * * * coils and transformers.

b. Plate Supply Unit PE–97–(*) or Power Supply Unit PE–120–A housing, tubes, tube sockets and transformers.

* * * * * * *

1. General.

This Technical Manual covers Radio Sets SCR–509–A, SCR–509–B, SCR–510–A, and SCR–510–B. Where there are specific differences, as in operation, wiring, or layout, each unit is described separately; otherwise they will be referred to as the *radio set*.

Throughout this manual Radio Receiver and Transmitter BC–620–(*) refers to Radio Receiver and Transmitter BC–620–A, and BC–620–F; Mounting FT–250–(*) refers to Mountings FT–250–A, FT–250–B, FT–250–C, FT–250–E, FT–250–F, FT–250–H, and FT–250–J; Case CS–79–(*) refers to Cases CS–79–A, CS–79–B, CS–79–C, CS–79–D, CS–79–E, CS–79–J, CS–79–K, CS–79–L, and CS–79–M; Mounting FT–317–(*) refers to Mountings FT–317–A, and FT–317–B; Plate Supply Unit PE–97–(*) refers to Plate Supply Units PE–97–A, PE–97–D, and PE–97–F; Antenna AN–45–(*) refers to Antennas AN–45–A, AN–45–B, AN–45–E, AN–45–F, and AN–45–G; Vibrator VB–1–(*) refers to Vibrators VB–1–A and VB–1–B; Vibrator VB–7–(*) refers to Vibrators VB–7–A and VB–7–B; and Capacitor CA–403–(*) refers to Capacitors CA–403–A and CA–403–B. These parts are interchangeable regardless of suffix letter. The symbol ( ) following a type number indicates that the text applies to all models, regardless of suffix letter.

Radio Sets SCR–509–A * * * handset or microphone.

3. RADIO SETS SCR–509–(*) AND SCR–510–(*)—COMPONENTS.

Signal Corps Stock Number	Quantity		ARTICLE	DIMENSIONS (Inches)					Unit Wt. (In lbs.)
	SCR–509–(*)	SCR–510–(*)		Height	Width	Depth	Length	Diameter	
3A41	2	2	Battery BA–41 (For BC–620–(*))	3½	2⅜	2½			0.66
			Bracket FT–426.						
			Bracket FT–427.						
			Bracket FT–428.						
			Bracket FT–449.						
			Cord CD–604 (For HS–30–(*))				10		
			Cord CD–605 (For HS–30–(*))				78		
3F1636			Cord CD–636 (Coaxial Antenna Lead).						
			Cord CD–689 (Issued with Mast Base MP–48–A).						
3G586		2	Insulator IN–86 (For Aux. Antenna)				3	1¼	
3G601			Insulator IN–101.						
3G611			Insulator IN–111.						
			Insulator IN–121.						
2A2088–48–A		1	Mast Base MP–48 (includes 6 ft. Wire W–128) or MP–48–A (includes Cord CO–689 and 6 ft. Wire W–128).	15				3¾	11.25
2A2090–50			Mast Bracket MP–50	5	5¼	8			4.25
2A2090–60			Mast Base Bracket MP–60.						
2B1630–(*) or 3B1645		1	Microphone T–30–(*) or T–45.						
3H3947(*)			Mounting FT–317–(*)	20⅞	12	6⅛			12.50

2Z7168A		*	Plug PL–68 (Used with GO–218 and BC–606–(*)).						
*	*	*	*	*	*	*	*	*	*
2Z6721–429			Reinforcing Plate FT–429 (For MP–50).		1½	3/16	4½		
2Z8056A		1	Roll BG–56–A (For Mast Sections)	45	9¼				1.50
2B1589/1		1	Shield, Breath (For Microphone T–45).						
2Z6721–418		*	Support FT–418.						
*	*	*	*	*	*	*	*	*	*
1B–128		6 feet	Wire W–128 (issued with MP–48).						
*	*	*	*	*	*	*	*	*	*
		2	Vibrator, 1 in Use, 1 Spare VB–11–A for 24-volt Vehicles VB–12–A for 6-volt Vehicles VB–13–A for 12-volt Vehicles						

T. O. 31-2-350-171

4. Description of Components.

* * * * * * *

c. Mounting FT-250-(*).

The shock mounting is shown in Figure 2 with Radio Receiver and Transmitter BC-620-(*) and Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A** in position. Holes are provided * * * SCR-510-A and SCR-510-B.

* * * * * * *

f. Cord CD-509.

An 8-foot extension cord, CD-509 is used to connect Radio Receiver and Transmitter BC-620-(*) to Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A** when units must be mounted apart (8 feet maximum) from each other. (Issued only with Radio Sets SCR-510-A and SCR-510-B.)

g. Mounting FT-317-(*).

This shock mounting is used in installations that require mounting of Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A** separately from Radio Receiver and Transmitter BC-620-(*). Holes are provided * * * SCR-510-A and SCR-510-B.

h. Plate Supply Unit PE-97-(*) and Power Supply Unit PE-120-A.

Plate Supply Unit PE-97-(*) is a vibrator type power supply and is designed for connection to either a 6-volt or 12-volt vehicular battery. Hooks and catch * * * 12-volt vehicular battery. (See Figure 5.)

Power Supply Unit PE-120-A is a vibrator type power supply, designed for connection to either 6-volt, 12-volt, or 24-volt vehicular batteries. Hooks and catch clips are provided on the power supply housing so that Radio Receiver and Transmitter BC-620-(*) can be mounted on top of, and secured to, Power Supply Unit PE-120-A. The entire assembly can in turn be fastened to Shock Mounting FT-250-(*) or Mounting FT-317-(*). Power Supply Unit PE-120-A is contained in a metal case with space provided for a spare vibrator and spare fuses. The vibrators are of the plug-in type for quick and easy replacement.

i. Radio Receiver and Transmitter BC-620-(*).

The receiver and * * * the front panel. (See Figure 7.) Clips are provided to fasten the receiver and transmitter

unit to battery case CS-79-(*), Plate Supply Unit PE-97-(*), Power Supply Unit PE-120-A, or Mounting FT-250-(*).

6. Installation.

* * * * * * *

c. Vehicular. (Radio Sets SCR-510-A and SCR-510-B.)

(1) Open Plate Supply * * * their respective clips. The same procedure is followed before connecting Power Supply Unit PE-120-A to a vehicular battery.

IMPORTANT

MAKE SURE THAT * * * in Figure 5.

The following procedure applies to Power Supply Unit PE-120-A only. To operate from a 6-volt vehicular battery, insert plug P_1 into socket SO_3, so that the notch in the plug base is in line with 6V stamped on edge of the chassis. This connects pin terminals Nos. 1 and 7, and puts section A of filament regulator V_3 in series with the receiver filament circuit. The circuit is filtered by r-f choke RFC_3, choke CH_2, and fixed capacitors C_4 and C_9. The receiver filament circuit is connected to pin C of socket SO_2. For transmitter filaments, plug P_1 connects pin terminals Nos. 8 and 4 of socket SO_3 completing the circuit to pin F of socket SO_2. The circuit is filtered by r-f choke RFC_3.

To operate from a 12-volt vehicular battery, insert plug P_1 into socket SO_3 so that the notch in the plug base is in line with 12V stamped on edge of the chassis. This connects pin terminals Nos. 1 and 5, and puts section B of filament regulator V_3 in series with the receiver filament circuit. The circuit is filtered by r-f choke RFC_3, choke CH_2, and fixed capacitors C_4 and C_9. For transmitter filaments, plug P_1 connects pin terminals Nos. 2 and 8 of socket SO_3, thus connecting R_6 in series with transmitter filament circuit. This circuit is filtered by r-f choke RFC_3.

To operate from a 24-volt vehicular battery, insert plug P_1 into socket SO_3 so that the notch in the plug base is in line with 24B stamped on edge of the chassis. This connects pin terminals Nos. 1 and 3 and puts sections B and C of filament regulator V_3 in series with the receiver filament circuit. The circuit is filtered by r-f choke RFC_3, choke CH_2, and fixed capacitors C_4 and C_9. For transmit-

ter filaments plug P_1 connects pin terminals Nos. 2 and 6 of socket SO_3, thus connecting resistor R_6 and R_7 in series with the transmitter filament circuit. This circuit is filtered by r-f choke RFC_3.

(2) If possible install * * * Terminal Box TM-206. In selecting this location, allow sufficient space to mount Radio Receiver and Transmitter BC-620-(*) on top of Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A. (See Figure 2.) * * * receiver and transmitter. When Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A is mounted separately from the receiver-transmitter unit, use Mounting FT-317-(*). Installation of Mounting * * * are given here.

(3) Radio Receiver and * * * Mounting FT-250-(*). That is, Case CS-79-(*) or Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A should not be carried with the receiver and transmitter vertical. Select positions for * * * mounted in position. After the shock mounting is fastened, place Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A, and Radio Receiver and Transmitter BC-620-(*) in position and fasten the catch clips. Connect the power cable plug of the radio receiver and transmitter to the corresponding receptacle of Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A, making sure they are matched properly and screwed together securely. Connect the "A" * * * bondnut. (See Figure 6.)

* * * * * * *

(5) Assemble Mast Base * * * the mast base. Use Wire W-128 24 inches (± 1 in.) long, routed through the guides of the mast base. (See Figure 4) * * * the complete assembly.

Notes: 1. If Cord CD-636 is not available, substitute 9 feet 4 inches of Cordage CD-282 and two couplings Lapp No. 26243 (Stock No. 2A2088-48/C4). This length is critical for proper impedance matching.

2. Cord CD-689 is used with Mast Base MP-48-A to replace the inner conductor referred to in paragraph 6*b*(5) for use in MP-48.

8. Operation.

* * * * * * *

b. Vehicular.

* * * * * * *

(8) Wind several turns * * * severe vibrating conditions. Put on a second serving of tape over the first. Use Clamps MC-423 * * * instead of tape.

* * * * * * *

(11) *Tying Down the Antenna.*

It may be * * * down the antenna. A metal fitting, a ceramic (porcelain) insulator, **such as Insulator IN–86 or IN–87,** and at least 15 feet of Rope RP–5 are issued for use as the tie-down assembly. Proceed as follows:

* * * * * * *

Figure 8, page 24, change reference to Wire W–126 to read "W–128."

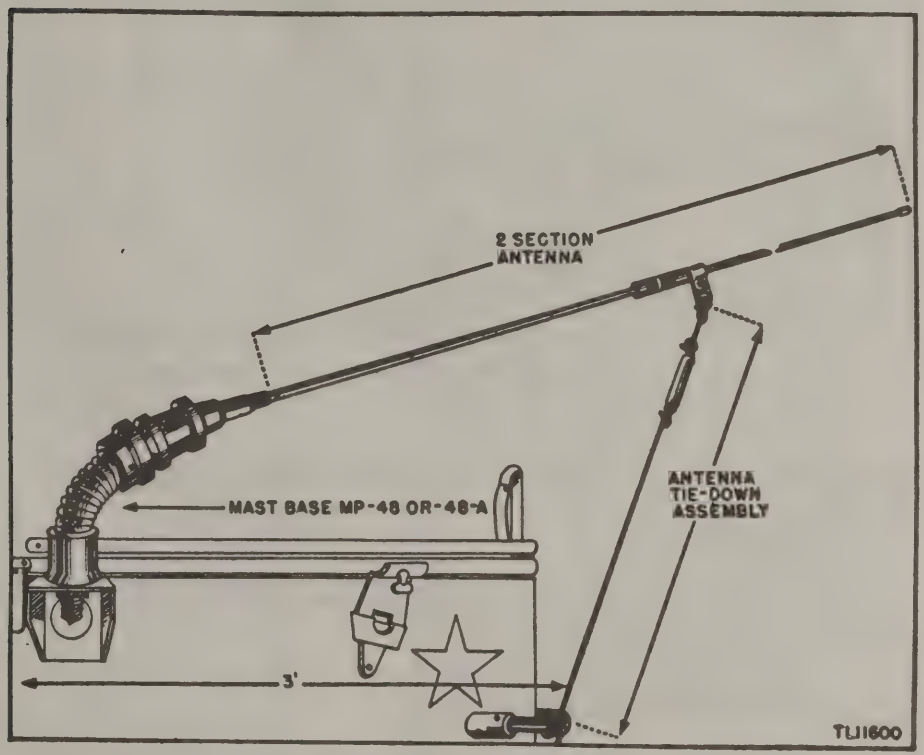

Figure 9. Tying Down Vehicular Antenna, Two Mast Section.

(*b*) Slip the metal fitting over the top end of the antenna, Mast Section MS–52. Slide the fitting down to the shoulder of the joint connection between the lower Mast Section MS–53 and the upper Mast Section MS–52. Fasten the metal fitting securely by means of attached screw. Pull the Antenna * * * mast base bracket. (See Figure 9.) As mentioned previously, a three mast section antenna consisting of Mast Section MS–51, Mast Section MS–52, and Mast Section MS–53 is used with a coaxial-cable feed line. This antenna is tied in the same manner

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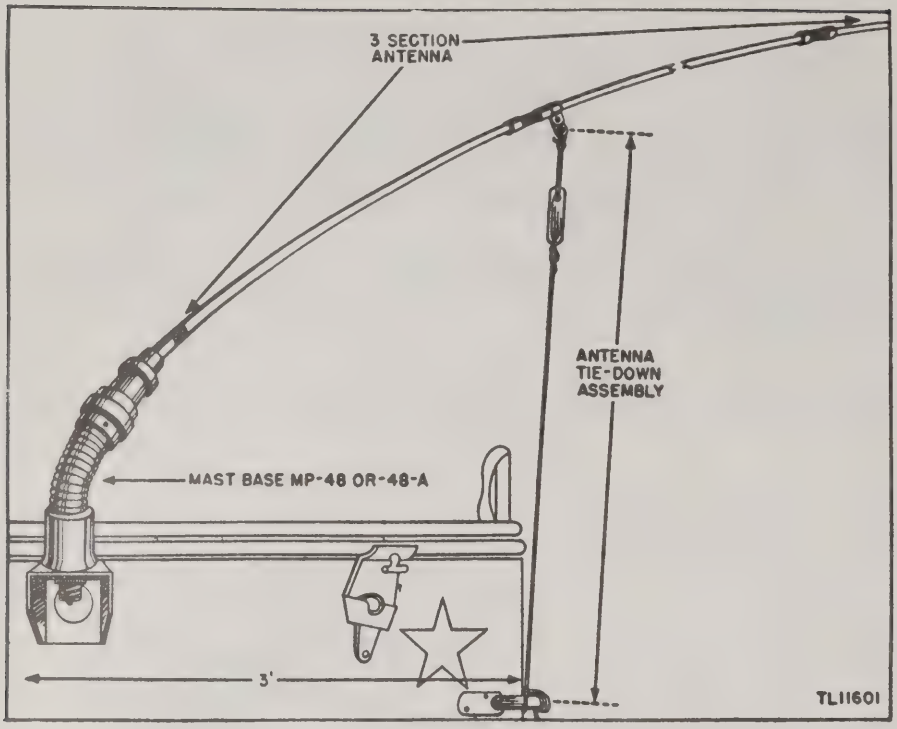


Figure 9.1. Tying Down Vehicular Antenna, Three Mast Section.

as the two section antenna described above. (See Figure 9.1.)

* * * * * * *

Figure 10, page 26, change reference to Wire W-126 to read "W-128."

9. Operating Precautions.

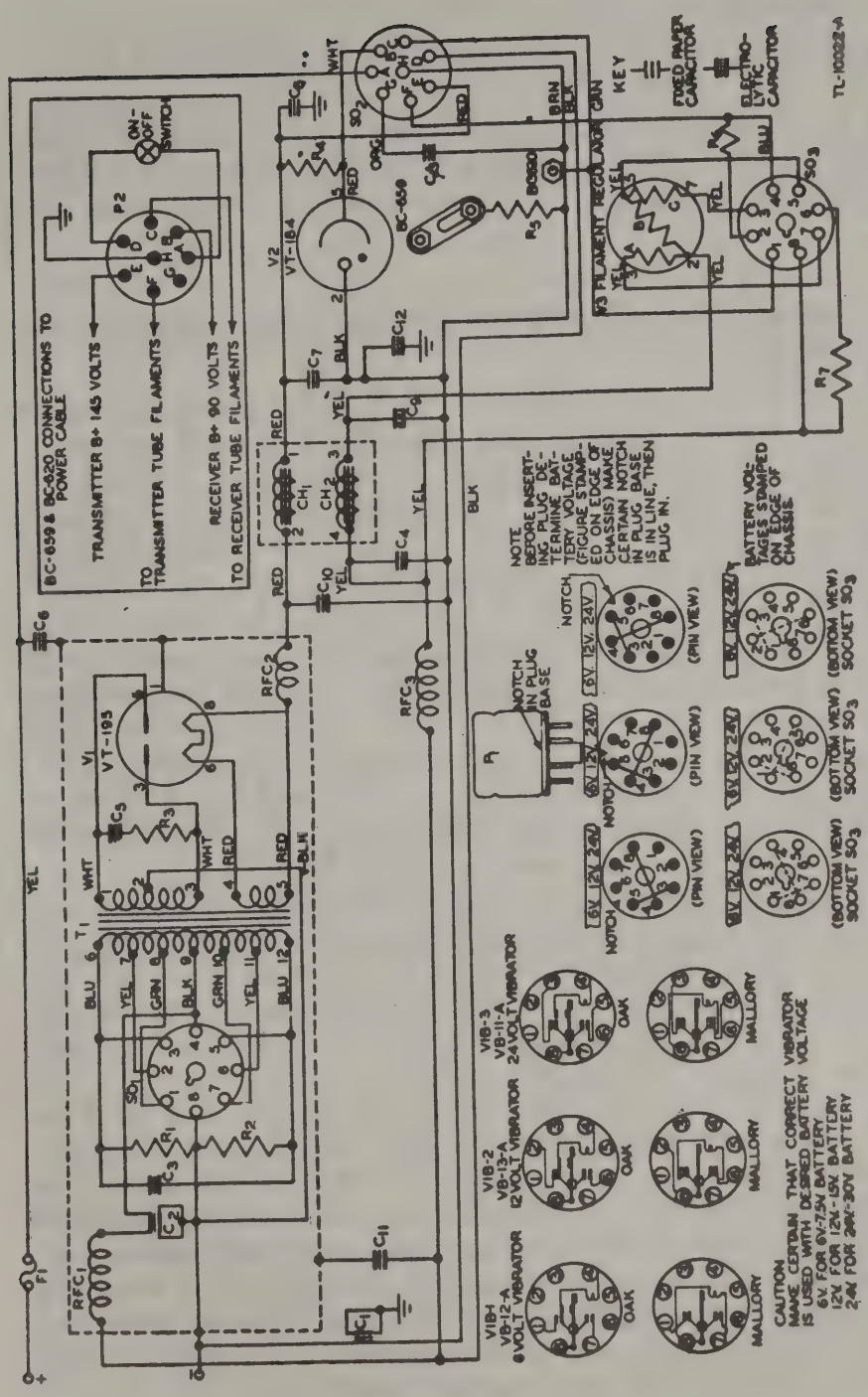
* * * * * * *

d. Check the condition * * * occasionally as follows:

* * * * * * *

(2) *Vehicular Battery Operation, Radio Sets SCR-510-A and SCR-510-B.*

Turn the meter * * * the panel meter. If it reads less than 2 (the luminous spot), it indicates a weak storage battery, or trouble in Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A.** Zero plate voltage may mean either a defective fuse, electrolytic Capacitor CA-403-(*), or **vibrator.** A spare of each of these is carried in the case



PE–120–A, Schematic Diagram. *Figure 11.1 Power Supply Unit*

of Plate Supply Unit PE–97–(*) and Power Supply Unit **PE–120–A.** To replace any * * * the vehicular battery.

10. Receiver.

a. The receiver is * * * Tube VT-185 (V_{13}). (See Figure 27.)

Two additional tubes are contained in Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A, a voltage regulator, Tube VT-184, and a rectifier, Tube VT-195.

* * * * * * *

12. Plate Supply Unit PE-97-(*) *and Power Supply Unit PE-120-A.*

Plate Supply Unit PE-97-(*) * * * 12-volt vehicular battery. Power Supply Unit PE-120-A is used to supply the correct operating voltage from a 6-volt, 12-volt, or 24-volt vehicular battery. The schematic wiring diagrams of Plate Supply Unit PE-97-(*) and Power Supply Unit PE-120-A are shown in Figures 11 and 11.1, respectively.

a. The battery supply * * * by fuse F_1. In order to prevent hash from the vibrator-plate-rectifier units from getting back into the vehicular battery leads, the positive and negative leads to the vibrator transformer in Plate Supply Unit PE-97-(*) are filtered with chokes CH_1, CH_2, and fixed capacitors C_2, C_3, C_4, and C_5. In Power Supply Unit PE-120-A, these leads are filtered with capacitors C_1, C_2, C_6, and r-f choke RFC_1.

b. The vibrator alternately applies the vehicular battery voltage to first one side and then the other of the primary of the vibrator transformer T_1. The a-c voltage * * * rectifier, Tube VT-195. The secondary winding (terminals 7-8 in PE-97-(*); 4-5 in PE-120-A) applies a-c voltage to the filament 6-8 of the rectifier, Tube VT-195. The high voltage from the secondary (terminals 4-6 in PE-97-(*); 1-3 in PE-120-A) of the Transformer T_1 is applied to the rectifier plates 3 and 5. The fixed capacitor (C_{11} in PE-97-(*); C_5 in PE-120-A) is a buffer capacitor which prevents radio frequency voltages from being generated in the rectifier tube, and at the same time tunes the secondary of the transformer T_1 to the correct operating frequency. This operating frequency, at which the vibrator applies potential to the primary windings of T_1, is determined by the mechanical resonance of the reed in the vibrator unit. The vibrator is * * * the schematic diagram. (See Figures 11 and 11.1.)

c. The d-c output of the rectifier, Tube VT-195, is ap-

plied through an r-f choke (**CH_4 in PE–97–(*); RFC_2 in PE–120–A**) to the "B" filter choke (**CH_5 in PE–97–(*); CH_1 in PE–120–A**). **In Plate Supply Unit PE–97–(*),** filter capacitor C_{10} contains two electrolytic capacitor units, which are connected to both sides of the "B" filter choke CH_5. **In Power Supply Unit PE–120–A, the d-c output of the rectifier is filtered by choke CH_1 and capacitor C_7 and C_{10}.** The filtered d-c high voltage output from Plate Supply Unit PE–97–(*) **or Power Supply Unit PE–120–A** appears at terminal No. 2 of **the filter** choke (**CH_5 in PE–97–(*); CH_1 in PE–120–A**) and is carried by the red wire to pin E of the power supply cable connector (**SO_3, PE–97–(*); SO_2, PE–120–A**).

d. The receiver "B" voltage regulator, Tube VT–184, **which is connected to terminal No. 2 of choke CH_5 through resistor R_7** in Plate Supply Unit PE–97–(*), and **to terminal No. 2 of Choke CH_1 through resistor R_4 in Power Supply Unit PE–120–A,** regulates the d-c voltage appearing at pin 5 of this tube. It is regulated to approximately 90 volts, and is carried **by the white lead to pin B of the power supply cable connector (SO_3 in PE–97–(*); SO_2 in PE–120–A).**

e. The receiver filament supply for Radio Receiver and Transmitter BC–620–(*) is obtained from Plate Supply Unit PE–97–(*) **or Power Supply Unit PE–120–A** through the green wire connecting to terminal C of the plate supply unit cable connector SO_3 **or SO_2, respectively. When Plate Supply Unit PE–97–(*) is used, the** hash and hum voltages that may occur across the vehicular battery terminals **are** filtered through filter chokes shown as CH_3. Hash capacitors are ** * * R_9 are added.*

* * * * * * *

g. (Added.) When the filament supply for Radio Receiver and Transmitter BC–620–(*) is obtained from Power Supply Unit PE–120–A, a filament regulator and resistor combination for supplying the correct voltage is used for operation from a 6-volt, 12-volt, or 24-volt vehicular battery. Plug P_1 is inserted into socket SO_3, to connect the required components in the circuit for correct filament voltage. (Refer to Paragraph 6c(1).)

(1) Check for proper installation of the vibrator, rectifier tube, and regulator tube in their respective receptacles.

(2) Close the cover of Power Supply Unit PE–120–A,

place Radio Receiver and Transmitter BC-620-(*) on top, and fasten with catch clips provided.

(3) Connect Power Supply Unit PE-120-A battery leads to the vehicular battery. The unit is now ready for operation.

h. (Added.) When Power Supply Unit PE-120-A is used, the vibrator must be changed when the vehicular battery voltage is changed.

Vibrator to be used	Vehicular battery voltage
VB-12-A	6 volts
VB-13-A	12 volts
VB-11-A	24 volts

14. Inspection.

a. If Radio Receiver * * * cause of failure.

* * * * * * *

(7) Check the connector plug and receptacle which join Radio Receiver and Transmitter BC-620-(*) to Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A if used and** to Case CS-79-(*). Be sure both * * * are tightly threaded.

* * * * * * *

c. Vehicular Battery Operation.

(1) Open Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A,** and check to make sure that Fuse F_1 is intact, **the vibrator,** rectifier Tube VT-195, voltage regulator Tube VT-184, and plug-in electrolytic Capacitor CA-403-(*) are seated properly in their respective sockets, and making good contact.

* * * * * * *

(3) Turn the meter * * * the panel meter. If it reads less than 2 (the luminous spot) it indicates a weak vehicular battery or trouble in Plate Supply Unit PE-97-(*) **or Power Supply Unit PE-120-A.** Zero plate voltage possibly indicates a defective fuse, defective Capacitor CA-403-(*) **or a defective vibrator.**

* * * * * * *

(5) (Added.) Replacements for Power Supply Unit PE-120-A are the same five items used in the Plate Supply Unit PE-97-(*) with the exception of the vibrator. Power

Supply Unit PE-120-A uses any one of the three following vibrators depending upon the voltage of the vehicular battery. Vibrator VB-12-A is used for a 6-volt supply, Vibrator VB-13-A for a 12-volt supply, and Vibrator BV-11-A for a 24-volt supply. One spare for any one of the above three vibrators is carried in suitable clips inside the Power Supply Unit PE-120-A. The Oak vibrator and the Mallory vibrator are interchangeable.

26.1 (Added). Power Supply Unit PE-120-A, Point-to-Point Resistance Values.

a. The same general procedure given for Plate Supply Unit PE-97-(*) (Paragraph 26) applies to Power Supply Unit PE-120-A.

b. Power and control receptacles continuity measurements. All measurements are made between receptacle contact H and contact indicated. Receptacle contacts are identified by letters.

Receptacle Marking	Resistance (in ohms)		
	6-volt operation	12-volt operation	24-volt operation
A	Open	Open	Open
B	Open	Open	Open
C	13	40	110
D	10	32	100
E	Open	Open	Open
F	10	58	170
G	Open	Open	Open

c. Normal choke and transformer d-c resistance values.

Description	D-c resistance	Description	D-c resistance
RFC_1 Choke, r-f	0.1 ohm	T Transformer	—
RFC_2 Choke, r-f	9.5 ohms	1–3	180 ohms
RFC_3 Choke, r-f	0.1 ohm	4–5	0.8 ohm
CH_1 Choke, "B" filter	200 ohms	6–12	2.5 ohms
CH_2 Choke, filament	2 ohms	7–11	0.6 ohm
		8–10	0.2 ohm

27. Adapter M–394.

a. Description.

* * * * * * *

(2) Adapter M–394 (**Figs. 13 and 14**) consists of a metal bracket on which is mounted a terminal block and a d.p.d.t., OFF-ALIGN, slide switch that is connected to a separate tube-socket-adapter-plug having a metering plug lead. The switch also * * * two separate leads. **The wiring diagram of Adapter M–394 is shown in Figure 16.**

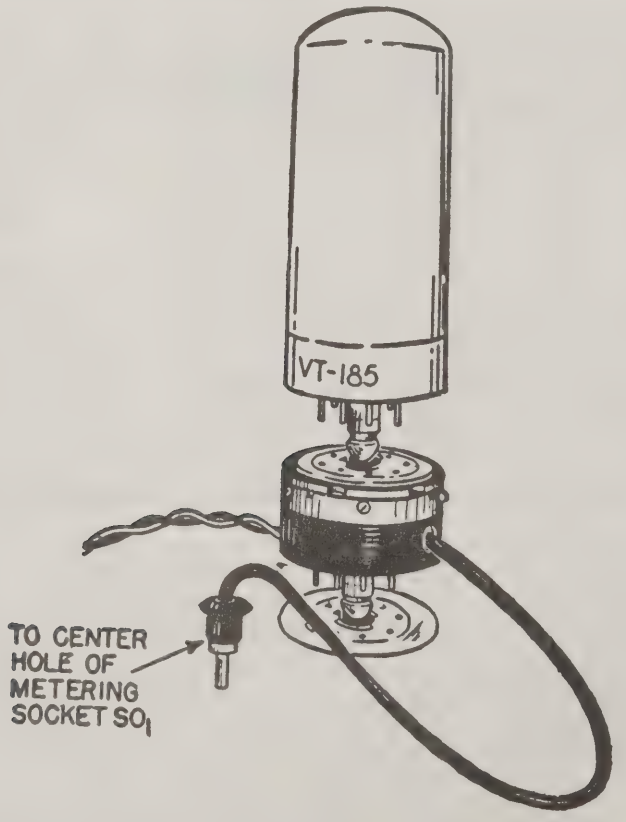
* * * * * * *

b. Installing Adapter M–394.

* * * * * * *

(3) Take the two separate leads of Adapter M–394 (**Fig. 14**), and connect them to the meter terminals attaching the red lead to the meter terminal nearest Transformer T_6.

(4) Remove the two screws from the edge of the top cover



TL-7295-A

Figure 15. Adapter M–394, installed in Radio Receiver and Transmitter BC–620–(*).

of **Battery Box BX–4** that contains Battery BA–41, and mount the bracket of Adapter M–394 there, using the original screws.

(5) Remove the receiver * * * the adapter plug. Then insert the VT–185 tube in the adapter plug socket as shown **in Figure 15.**

(6) Insert the adapter metering plug in the center hole of the metering socket **(Fig. 15)**, and throw the adapter switch to OFF.

(7) Replace Radio Receiver and Transmitter BC–620–(*) in its case. Be sure the gasket is properly seated. Tighten the panel * * * through the gasket.

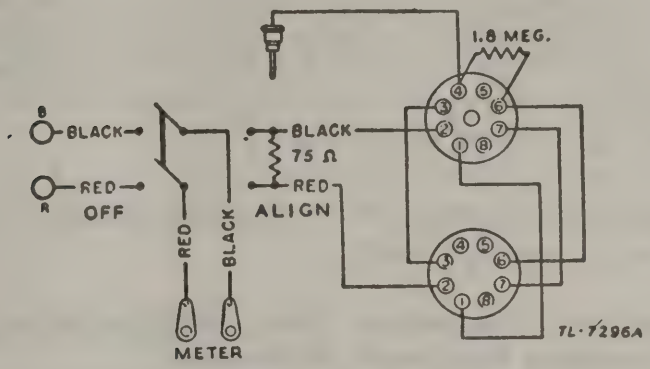


Figure 16. Adapter M–394, Circuit Diagram.

28. Presetting, General.

* * * * * * *

g. These steps in * * * 29 and 30.

* * * * * * *

(5) Set each trimmer * * * the following chart:

* * * * * * *

Footnote to chart is rescinded.

*NOTE: Red dots on * * * meshing the capacitor. The end of the slot near the 1 of the 1-8 scale is the end that should carry the red dot.*

CAUTION: *In adjusting the * * * plates, or breakage.*

NOTE: The chart giving approximate trimmer settings, on page 55, applies only to those installations not using Terminal Box TM–206. For installations using Terminal Box TM–206 the following chart must be used:

APPROXIMATE TRIMMER SETTINGS (Added.)

Channel No.	A1 B1	A2 B2	A3 B3	A4 B4	A5 B5	A6 / B6	Positions of pins in L_1
0–19	3.0	2.0	2.0	2.0	1.5	3.0	7
20–29	5.0	2.8	4.0	2.5	2.0	3.8	7
30–39	5.5	5.0	4.5	4.5	4.5	5.0	7
40–44	6.0	5.8	5.5	5.2	5.2	5.8	7
45–54	6.0	5.8	5.5	5.2	5.2	5.8	6
55–64	6.9	6.8	6.5	6.0	6.2	6.5	5
65–74	6.9	6.8	6.5	6.0	6.2	6.5	3
75–80	7.4	7.8	7.2	7.0	7.8	7.2	1

(6) (Superseded.) Remove Battery BA-41 and check its voltage with an external electronic voltmeter. Measure the voltage from —C to —30 C. Replace if the reading is less than 24 volts. Measure the voltage from —B to —60 B. Replace if the reading is less than 48 volts.

* * * * * * *

h. The procedure from * * * the same channels. Separate the two sets at least 500 yards.

29. Presetting Procedure Using Voltohmmeter I–107–(*) or other Electronic Voltmeter.

* * * * * * *

d. The following steps * * * while making adjustments.

* * * * * * *

(6) Set SW_{11} to ON. Turn panel meter to OPER. Quickly tune A6 (B6) for **minimum** on the panel meter.

* * * * * * *

30. Presetting Procedure Using Adapter M–394.

* * * * * * *

b. Set Adapter M-394 switch to ALIGN. Set SW_{10} and SW_{11} to OFF. Set the panel * * * *be preset first. The receiver must be preset before the transmitter.*

c. The following steps * * * the microphone switch.

(1) To check crystal * * * of metering socket. With VOLUME control fully clockwise (to the right), the meter reading should **approximate** zero for good crystals.

* * * * * * *

d. The following steps preset the *transmitter*. Press the

microphone switch only long enough to make the adjustments.

(1) Insert probe in * * * its approximate setting. You will find more than one dip. Choose the dip that will give the *minimum* reading on the meter and still be *near* the approximate setting. Tune A2 (B2) accurately for *minimum* on this dip.

* * * * * * *

(3) Press microphone switch * * * moved too far. Go back to step (1) and get back on the correct dip again. Check that it * * * into the microphone.

* * * * * * *

(5) Set Adapter M-394 switch to OFF. Place probe in center hole of metering socket. Check that panel * * * its normal circuits.

* * * * * * *

(7) Set SW_{11} to ON. Turn panel meter switch to OPER. Quickly tune A6 (B6) for minimum on the panel meter.

* * * * * * *

32. Neutralization.

a. Neutralization of the * * * power amplifier stage. Make sure the receiver and transmitter are both properly tuned before checking neutralization.

* * * * * * *

c. To neutralize:

* * * * * * *

(3) Check dip on * * * for both channels.

NOTE: Best results will be had using the highest frequency crystal available.

d. (Superseded.) *As a final check.*

(1) Set SW_{11} to ON and panel meter switch to OPER. Quickly tune A6 (B6) for minimum reading on the panel meter (microphone switch must be pressed while making this adjustment).

(2) Restore the set to its case and connect antenna to be used. Recheck A6 (B6) for minimum reading on the panel reading.

33.1 (Added). **Moistureproofing and Fungiproofing.**

a. General. Communication failures commonly occur when Signal Corps equipment is operated in tropical areas where temperature and relative humidity are extremely high. The following problems are typical:

(1) Resistors and capacitors fail.

(2) Electrolytic action takes place in coils, chokes, transformer windings, etc., causing eventual breakdown.

(3) Hook-up wire and cable insulation breakdown. Fungus growth accelerates deterioration.

(4) Moisture provides leakage paths between battery terminals.

b. Treatment. A moistureproofing and fungiproofing treatment has been devised which, if properly applied, provides a reasonable degree of protection against fungus growth, insects, corrosion, salt spray, and moisture. The treatment involves the use of a moistureproofing and fungiresistant varnish applied by means of a spray gun. A brief description of the method of application follows:

(1) Make all repairs and adjustments necessary for the proper operation of the equipment.

(2) Thoroughly clean the equipment of all dirt, dust, rust, fungus, oil, and grease.

(3) Partially disassemble the equipment. Cover with masking tape certain points, such as relay contacts, open switch, air capacitors, sockets, and bearings.

(4) Let the equipment dry thoroughly to expel moisture which the circuit elements have absorbed.

(5) Spray or paint all circuit elements and all parts of the equipment with three coats of moistureproofing and fungiproofing varnish.

(6) The equipment should be given a final operational check; radio sets receiving a 24 to 36 hour aging period, when time permits, before alignment.

c. Step-by-step instructions. (1) Disassembly.

(*a*) Remove the meter. (See maintenance section of TM 11–472.)

(*b*) Remove chassis of Radio Receiver and Transmitter BC–620–(*) from case.

(*c*) Work on one side of the chassis at a time; work on the upper part first.

(*d*) Remove all tubes.

(e) Remove all shields marked L_2, L_3, L_4, L_5, T_3, T_4, T_5, and T_6.

(*f*) Remove all crystals. Look in spare crystal boxes for spares.

(*g*) Remove Battery BA-41.

(2) *Masking.* (*a*) Cover all tube sockets, including metering socket, with masking tape.

(*b*) Cover antenna contacts with masking tape.

(*c*) Apply masking tape to prongs where Battery BA-41 is plugged in.

(*d*) Wrap masking tape completely around and above trimmers on discriminator transformer T_6.

(*e*) Cover with strips of masking tape the tops of receiver oscillator trimmers A_1 and B_1, mixer trimmers A_3 and B_3, transmitter oscillator trimmer A_2 and B_2, buffer grid trimmers A_4 and B_4, power amplifier grid trimmers A_5 and B_5, and power amplifier plate trimmers A_6 and B_6.

NOTE: The above subparagraphs refer to components located on the upper part of the chassis. The following subparagraphs refer to components located on the lower part of the chassis.

(*f*) Cover openings of microphone jack J_1 and headphone jack J_2 with strips of masking tape.

(*g*) Mold paper to cover trimmers marked C_2 and C_3. Fasten molded paper in place with masking tape.

(*h*) Mold paper around trimmer marked C_5 and fasten molded paper with masking tape.

(*i*) Mold paper around trimmers marked C_4, C_7, C_8, C_{13}, C_{12}, C_{21}, and C_{20}. Tie down molded paper with masking tape.

(*j*) Apply masking tape strips, covering all contacts on channel switch SW_8, SW_6, SW_{1A}, SW_4, and meter switch SW_9.

(*k*) Mold paper around trimmers marked C_{42}, C_{41}, C_{38}, and C_{37}.

(*l*) Open case and remove cover from Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A. Remove tubes and mask all tube sockets with masking tape. Apply tape to fuse and tighten down all nuts.

(*m*) Open Case CS-79 and remove battery. Wrap masking tape around prongs of plug.

(3) *Drying.* Dry for 2 to 3 hours at 160° F.

(4) *Varnishing.* Apply three coats of moistureproofing

and fungiproofing varnish. Allow set to age for 24 to 36 hours, if possible.

(5) Reassemble and test operation.

(6) Mark MFP and date of treatment.

d. Reference. For a full description of the varnish spray method of moistureproofing and fungiproofing refer to TB SIG 13.

33.2 (Added). **Corrective Measures and Maintenance Hints.**

a. The plug connectors on Cord CD-509 sometimes develop a short at the inside terminals when exposed to moisture or excessive humidity. It is advisable to wrap rubber tape over each complete connector to prevent this possibility.

b. Waterproof covers which encase Radio Receiver and Transmitter BC-620-(*), and which need not be removed when equipment is in operation, are available on requisition. Specify "Cover BG-153, Stock No. 2Z3400-153."

c. When reinstalling equipment, after repairs have been performed, make sure the voltage change-over links are set for the voltage of the vehicular battery. If a 12-volt battery is used with a power unit which has its links set for 6 volts, damage will result. Refer to paragraph 6 for link and plug connections for 6-, 12-, or 24-volt operation.

The legend for Figure 20 is changed as follows:

Figure 20. Radio Receiver and Transmitter BC-620-(*), and Plate Supply Unit PE-97-(*) or Power Supply Unit PE-120-A, Tube Base Connections and Element Layout.

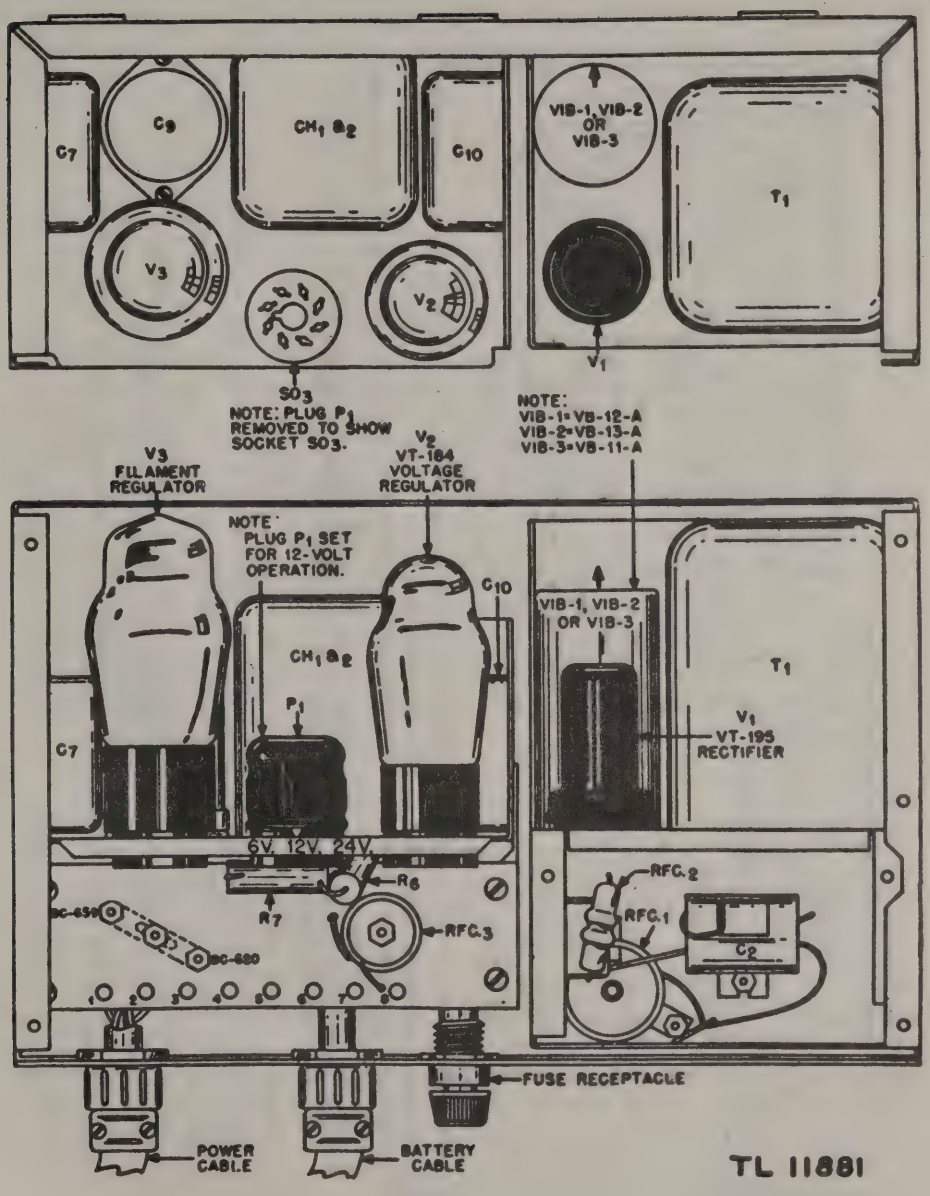


Figure 24.1. Power Supply Unit PE–120–A, Parts Location Detail.

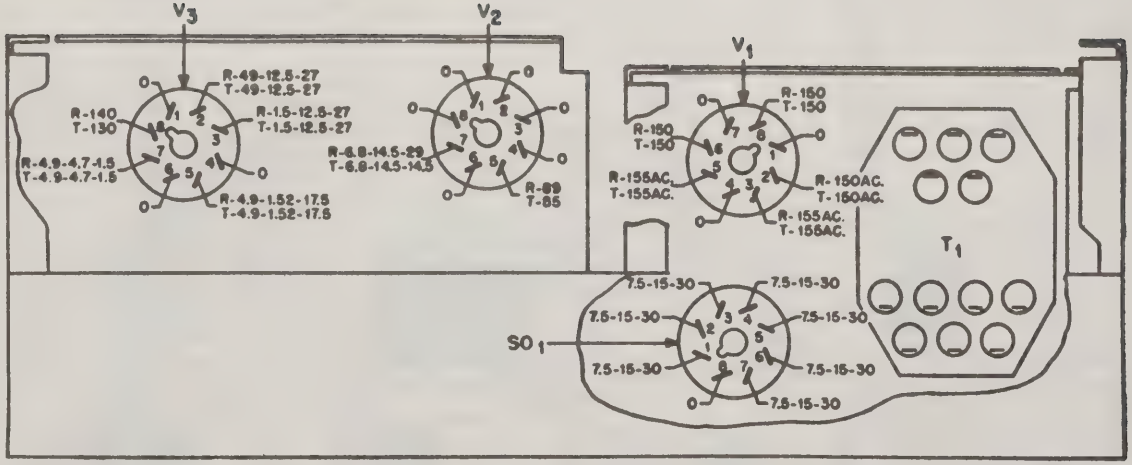


Figure 25.1. Power Supply Unit PE-120-A, Voltage Diagram.

NOTE:- VOLTAGE MEASUREMENTS MADE UNDER THE FOLLOWING CONDITIONS.

1. POWER SUPPLY UNIT PE-120-A CONNECTED TO RADIO RECEIVER AND TRANSMITTER BC-620-(*) WHICH IS KNOWN TO BE IN GOOD OPERATING CONDITION.
2. VOLTAGE INPUT TO PE-120-A. CAUTION: SEE PAR.37 BEFORE CONNECTING TO VEHICULAR BATTERY. WHERE THREE VALUES ARE GIVEN, THEY ARE FOR 6,12 & 24 VOLT BATTERY INPUT RESPECTIVELY. ALL VALUES SHOWN ARE NOMINAL.
3. R= WITH BC-620-(*) IN RECEIVE POSITION. T= WITH BC-620-(*) IN TRANSMIT POSITION.
4. VOLTAGES MEASURED WITH VACUUM TUBE VOLTMETER (RCA VOLTOHMYST, STOCK No. 168, HICKOK 202) OR EQUIVALENT. ALL READINGS ARE D-C VOLTS EXCEPT WHERE INDICATED AS A-C. ALL VOLTAGES MEASURED BETWEEN POINT INDICATED AND B- (BROWN LEAD).
5. WITH VOLTAGE REGULATOR V_2, VT-184 WORKING.
6. CURRENT DRAIN WITH 6 VOLT INPUT- 3.0 AMPERES IN RECEIVE POSITION. 4.5 AMPERES IN TRANSMIT POSITION. WITH 12-VOLT INPUT.- 2.0 AMPERES IN RECEIVE POSITION. 2.75 AMPERES IN TRANSMIT POSITION. WITH 24-VOLT INPUT.- 1.5 AMPERES IN RECEIVE POSITION 2.0 AMPERES IN TRANSMIT POSITION.
7. ALL VALUES SHOWN ARE WITH 7.5, 15 AND 30 VOLT INPUT, WHICH SHOULD OCCUR WHEN 6, 12 AND 24 VOLT BATTERIES ARE FULLY CHARGED, OR WHEN VEHICLE'S GENERATOR IS OPERATING.

TL 11880

33.3. (Added.) Schedule of Preventive Maintenance Checks.

Items to be checked	Daily before operation	Daily during operation	Daily after operation	Weekly
a. Radio Receiver and Transmitter BC–620–(*).				
1. Antenna is complete (Antenna AN–45–A, and if mounted in vehicle Mast Base MP–43, using Bracket MP–50 or MP–54, with two section Mast MS–52 and MS–53). See that joints are taped and tight.	x		x	
2. Antenna is vertical and all connections, including ground connections, are clean and tight	x		x	
3. Antenna connecting lead length is exactly 2 feet, and connection clean and tight	x		x	
4. Battery plug prongs are clean	x		x	
5. Connection between plug and socket of Radio Receiver and Transmitter BC–620–(*) and Plate Supply Unit PE–97–(*) or Power Supply Unit PE–120–A are screwed together securely with good electrical contact.	x		x	
6. Cords, plugs and connections are secure	x	x	x	
7. Handset TS–13–(*), plug, and jack contacts are clean, and cord is in good condition. (Insert plugs in proper jacks in BC–620–(*)).	x		x	
8. Vehicle battery voltage checks satisfactorily by reading meter, with meter switch on PLATE and with meter switch on FIL. (Should not read less than 2 volts in either case).	x		x	
9. Test dry battery voltage as follows: (*a*) Disconnect Radio Receiver and Transmitter BC–620–(*) from Plate Supply Unit PE–97–(*) or Power Supply Unit PE–120–A and connect to Case CS–79–(*). (*b*) Turn meter control switch to PLATE and press the push-to-talk button on Handset TS–13–(*) and read the meter. (If meter reads less than 2 volts it indicates a weak Battery BA–39.) (*c*) Turn the switch to FIL and read meter. (If meter reads less than 2 volts it indicates a weak Battery BA–40.) *Note.* Battery BA–41 current is negligible and therefore, it should be replaced about every 8 months, which is normal shelf life.	x		x	
10. Set mountings secure	x		x	
11. Check spare parts as listed in the Organizational Spare Parts List, Signal Corps sections of Army Service Forces Catalog for completeness and serviceability; arranging for replacement of unserviceable items.	x		x	
12. Crystals of correct frequency are installed for two pre-selected channels of operation	x		x	

T. O. 31R2-3SCR-171

13. Transmitter is functioning satisfactorily. (Select one channel with CHAN switch. Turn control switch to OPER and with the push-to-talk button depressed, read the meter. Meter should read between 1.5 and 2.5.)	x		x	
14. Receiver is functioning satisfactorily	x		x	
15. Radio Receiver and Transmitter BC–620–(*) is mounted on Plate Supply Unit PE–97–(*), Power Unit PE–120–A, *or* Case CS–79–(*) and latched together.	x	x	x	
16. Message book, log sheet, pencil, etc. are on hand	x		x	
17. Switch and volume control knob is turned ON and turned clockwise for desired volume level		x		
18. Meter switch is turned to OPER		x		
19. CHAN selector switch is on channel desired		x		
20. Press switch on handset and speak clearly into microphone when transmitting and release switch when transmission is completed.		x		
21. Check meter reading during transmission. (Meter should read between 1.5 and 2.5.)		x		
22. (*a*) Occasionally turn left-hand switch to PLATE and press the push-to-talk switch on handset and read panel meter. (Meter should read 2 or more.) (*b*) Release push-to-talk switch and turn left-hand switch to FIL and read meter. (Meter should read 2 or more.)		x		
23. Turn volume control knob to OFF when set is turned off		x		
24. Never place all three units (BC–620–(*), PE–97–(*), or PE–120–A, and CS–79–(*)) on Mounting FT–250–(*).		x		
25. Do not place heavy objects on radio		x		
26. Keep equipment dry		x		
27. Clean set thoroughly with dry clean cloth and/or air hose			x	
28. Turn volume control knob to OFF			x	
29. Antenna joints are taped and secure				x
30. Antenna is straight and vertical				x
31. Mast base is secure				x
32. Mast base insulator is in good condition				x
33. Lead-in wire is connected and of proper size and length				x
34. Lead-in wire is insulated from surrounding objects				x
35. Drip loop is provided				x
36. Ground connections are secure				x
37. Bolts and screws are tight				x
38. Rubber mountings are free				x
39. Mounted spare parts are secure to mountings				x
40. Meter switch, channel selector switch, and volume control switch operate and are secure on shafts.				x
41. Cords, plugs, and all connections are tight and dry				x

33.3. (Added.) **Schedule of Preventive Maintenance Checks.** (Continued.)

Items to be checked	Daily before operation	Daily during operation	Daily after operation	Weekly
42. Tubes are firmly seated in sockets				x
43. Check desiccator; blue indicates dry. Pink color indicates moisture saturated and requires regeneration. (Dry in warm, dry, circulating air.)				x
44. Crystals are of correct frequency and are secure in correct sockets				x
45. Alignment adjustment is correct				x
46. Check plate meter reading. (Meter should read not less than 2.)				x
47. Check filament meter reading. (Meter should read not less than 2.)				x
48. Check meter reading in operate position. (Meter should read between 1.5 and 2.5.)				x
49. Check fuses				x
b. Plate Supply Unit PE–97–(*) or Power Supply Unit PE–120–A				
50. Cable receptacle in good condition				x
51. Headset is on hand and in condition				x
52. Plate supply unit vibrator, rectifier, electrolytic capacitor, and fuse are properly installed in their respective receptacles.				x
53. The voltage change-over links are properly set, and connections are clean and tight				x
54. Check spare parts as listed in the Organizational Spare Parts List, Signal Corps sections of Army Service Forces Catalog for completeness and serviceability; arranging for replacement of unserviceable items.				x
c. Vehicle.				
55. The storage battery electrolyte has a specific gravity above 1.150				x
56. Battery electrolyte covers plates				x
57. Terminals are clean, tight, and greased				x
58. Ground connections are clean and tight				x
59. Battery leads, cords, plugs, etc., are in good condition				x
60. Battery voltages are correct under load				x
d. Over-all.				
61. All parts of installation are dry and protected from weather				x
62. All parts are clean, inside and out				x
63. Volume control knob is turned to OFF				x

34. (Superseded.) MAINTENANCE PARTS LIST FOR RADIO SET SCR–509–(*).

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR–509–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2S509	RADIO SET SCR–509–(*)				*	*	*	*
	6Q338–150	ALIGNMENT TOOL TL–150: (substitute Alignment Tool TL–207, stock No. 6Q349).			*	*	*	*	*
	2A245A	ANTENNA AN–45–A				*	*	*	*
	3A39	BATTERY BA–39				*	*	*	*
	3A40	BATTERY BA–40				*	*	*	*
	3A41	BATTERY BA–41			*	*	*	*	*
	2Z1612	CAP AND CHAIN: (with neoprene gasket; Amphenol 9760–20).				*	*	*	*
	2Z33543.1	†CRYSTAL SET: (consists of 80 Crystal Holders FT–243–(*) with transmitter-receiver crystals of frequencies varying from 20.0 mc to 27.9 mc in steps of 100-kc channels No. 0 to 79 inclusive; for operating Radio Receiver and Transmitter BC–620–(*).			*	*	*	*	*
	3B879( )	CASE CS–79–(*): (component; for batteries)			*	*	*	*	*
	2B613( )	HANDSET TS–13–(*)							
	2Z3400–153	COVER BG–153			*	*	*		*
	2C5360( )	RADIO RECEIVER AND TRANSMITTER BC–620–(*).							
	2Z9019	STRAP ST–19				*	*	*	*
	2J1LH4	TUBE (VT–177) JAN–1LH4				*	*	*	*
	2J1LC6	TUBE (VT–178) JAN–1LC6				*	*	*	*
	2J1LN5	TUBE (VT–179) JAN–1LN5				*	*	*	*
	2J387/1291	TUBE (VT–182) JAN–3B7/1291				*	*	*	*
	2J1R4/1294	TUBE (VT–183) JAN–1R4/1294				*	*	*	*
	2J3D6/1299	TUBE (VT–185) JAN–3D6/1299				*	*	*	*
	1B29	WIRE W–29							

* Indicates stock available.
† Individual crystals may be ordered by giving above description and exact channel or operating frequency.

34.1. Maintenance Parts List for Radio Set SCR–510–(*).

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR–510–(*)	Running spares	Orgn stock	3d echn	4th echn	5th echn	Depot stock
	2S510–( )	RADIO SET SCR–510–(*)	1						*
	6Q349	ALIGNMENT TOOL TL–207	1			*	*	*	*
	2A245A	ANTENNA AN–45–A	1		*	*	*	*	*
	2Z551–159	BAG BG159: (available for amphibious operation)	1		*	*	*	*	*
	2Z1246–7	BRACKET ASSEMBLY: (for power cable)	1		*	*	*	*	*
	3A39	BATTERY BA–39				*	*	*	*
	3A40	BATTERY BA–40				*	*	*	*
	3A41	BATTERY BA–41				*	*	*	*
	3B879( )	CASE CS–79–(*): (for battery power supply; component)	1		*	*			*
	2Z1890–137	CASE CS–137: (for crystal box)	1		*	*	*	*	*
	2Z2651–424	CLAMP MC–424: (for Mast Section MS–52)	1		*				*
	3Z1375–1.1	CONNECTOR AND BONDNUT: (for power cord) Appleton No. 61007 and Bondnut BL–50 respectively.	1			*	*	*	*
	3E1307A5.5	CORD CD–307–A: 65″ long; (for Headset HS–30)	1		*	*			*
	3E1494	CORD CD–494: (for Headset TS–13)	1		*	*			*
	3E1604	CORD CD–604: 10″ long; (for headset HS–30)	1		*	*			*
	2Z3400–153	COVER BG–153: (for Radio Receiver and Transmitter BC–620).	1		*	*	*		*
	2Z3400–108	COVER BG–108: (for Mast Base MP–48–A)	1		*	*	*	*	*
	2Z3543.1	†CRYSTAL SET: consists of 80 Crystal Holders FT–243–(*) with transmitter-receiver crystals of frequencies varying from 20.0 mc to 27.9 mc in steps of 100-kc channels No. 0 to 79 inclusive, for operating audio Transmitter BC–620–(*).	1			*	*	*	*
	3G586	FITTING: (used with Rope RP–5)	1		*	*	*	*	*
	3Z2587	FUSE: ¼-amp; 250-v; Littelfuse type 3AG	1		*	*	*	*	*
	2B613( )	HANDSET TS–13–(*): (component)	1		*	*	*	*	*
	2B830( )	HEADSET HS–30–(*): (component)	1		*	*	*	*	*
	6D13038	TECHNICAL MANUAL TM11–605	2		*	*	*	*	*
	3G586( )	INSULATOR IN–86–(*): (for auxiliary antenna)	2		*	*			*
	2A2088–48A	MAST BASE MP–48–A: (component)	1		*	*	*		*

2A2352	MAST SECTION MS-52	1	---	---	*	*	---	*
2A2353	MAST SECTION MS-53	1	---	---	*	*	---	*
2B1617	MICROPHONE T-17: (component)	1	---	*	*	*	*	*
2B1567	MICROPHONE COVER M-367	1	---	*	*	*	*	*
2Z6721-250( )	MOUNTING FT-250-(*): (component)	1	---	*	*	*	---	*
3H4297( )	POWER UNIT PE-97-(*): (component)	1	---	*	*	*	*	*
3H4600-120	POWER SUPPLY UNIT PE-120-A	1	---	*	*	*	*	*
2C5360-( )	RADIO RECEIVER AND TRANSMITTER BC-620-(*): (component).	1	---	*	*	*	---	*
2Z8056( )	ROLL BG-56-(*): (for mast sections)	1	---	*	*	---	---	*
3H6713	VIBRATOR VB-13: (used in 12-v vehicles)	---	---	*	*	*	*	*
2J1LH4	TUBE (VT-177) JAN-1LH4	1	---	---	*	*	*	*
2J1LC6	TUBE (VT-178) JAN-1LC6	1	---	---	*	*	*	*
2J1LN4	TUBE (VT-179) JAN-1LN5	4	---	---	*	*	*	*
2J3B7/1291	TUBE (VT-182) JAN-3B7/1291	2	---	---	*	*	*	*
2J1R4/1294	TUBE (VT-183) JAN-1R4/1294	1	---	---	*	*	*	*
2J0B3/VR90	TUBE (VT-184) JAN-0D3/VR-90	1	---	---	*	*	*	*
2J3D6/1299	TUBE (VT-185) JAN-3D6/1299	4	---	---	*	*	*	*
2J1005	TUBE (VT-195) JAN-1005	1	---	---	*	*	*	*
1B29	WIRE W-29: 27 feet long; (auxiliary antenna)	1	---	*	*	*	*	*
1B128	WIRE W-128: No. 14 tinned copper; single-conductor; (rubber insulation).	5	---	*	*	*	*	*
6Z7926	ROPE RP-5	---	---	*	*	---	---	*
2Z9019A	STRAP ST-19-A: (used on all but 4 installations on MPL).	---	---	*	*	---	---	*
	Hardware kit for all installations							
5B2108.1	CLAMP: special	---	---	---	*	*	*	*
2S510/ML/1	HOOK: special; (SC-A-5276)	---	---	---	*	*	*	*
6L3504-20S	NUT: steel; hex ¼-20	---	---	*	*	*	*	*
6L3505-24S	NUT: steel; hex 5/16-24	---	---	*	*	*	*	*
6L3608-32S	NUT: steel; hex 8-32	---	---	*	*	*	*	*
6L7920-4-12.81	SCREW: machine; brass; hex head; ¼-20 x ¾"	---	---	*	*	*	*	*
6L4904-16.20	SCREW: machine; hex head; ¼-20 x 1"	---	---	*	*	*	*	*
6L7920-4-24.81	SCREW: machine; brass; hex head; ¼-20 x 1½"	---	---	*	*	*	*	*
6L924-5-20.81	SCREW: machine; brass; hex head; 5/16-24 x 1/14"	---	---	*	*	*	*	*
6L7924-5-32	SCREW: machine; brass; hex head; 5/16-24 x 2"	---	---	*	*	*	*	*
6L5832-12.1	SCREW: machine; brass; roundhead; 8-32 x ¾"	---	---	*	*	*	*	*

* Indicates stock available.
† Individual crystals may be ordered by giving above description and exact channel or operating frequency.

34.1. Maintenance Parts List for Radio Set SCR–510–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR–510–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	6L73027	WASHER: flat; steel; No. 8			*	*	*	*	*
	6L60004	WASHER: flat; steel; ¼"			*	*	*	*	*
	6L60005	WASHER: flat; steel; 5/16"			*	*	*	*	*
	6L70008	WASHER: lock; steel, split; No. 8			*	*	*	*	*
	6L72932–2	WASHER: lock; steel; split; ¼"			*	*	*	*	*
	3H4575T/W30	WASHER: lock; steel; split; 5/16"			*	*	*	*	*
		Add for Installation in Light Tank T9E1							
	3E1318A	CORD CD–318–A: (for Microphone T–45)	1		*	*			*
	3E1509	CORD CD–509: (for power cable)	1		*	*			*
	2Z5725–475	INSTALLATION KIT MC–475	1		*	*	*	*	*
	6D12510( )–V59	INSTRUCTIONS: installation	1			*	*	*	*
	3G601	INSULATOR IN–101: 1⅝" long	1			*			*
	2B1645	MICROPHONE T–45: (component)	1		*	*	*	*	*
	2B1589/1	SHIELD: breath; (for Microphone T–45)	1		*	*	*	*	*
		Add for Installation in Light Armored Car M8							
	5C2806	BOX TM–206: (antenna terminal)	1			*			*
	2Z2651–423	CLAMP MC–423: (for Mast Section MS–51)	1		*				*
	3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*
	3E1689	CORD CD–689	1		*	*			*
	3E1318A	CORD CD–318–A: (for Microphone T–45)	1		*	*			*
	3Z3400–153	COVER BG–153	1		*	*	*	*	*
	6D15375–V17	INSTRUCTIONS: installation	1			*	*	*	*
	3G601	INSULATOR IN–121	2			*			*
	2A2351	MAST SECTION MS–51	1			*	*	*	*
	2B1645	MICROPHONE T–45: (component)	1		*	*	*	*	*
	2B1589/1	SHIELD: breath; (for Microphone T–45)	1		*	*	*	*	*

	Add for Installation in Scout Car M3A1							
3E1605-6.5	CORD CD-605: 78″ long; (for Headset HS-30)	1	-------	*	*	*	*	*
6D15275-V13	INSTRUCTIONS: installation	1	-------	-------	*	*	*	*
2A2090-50	MAST BRACKET MP-50	1	-------	-------	-------	-------	-------	*
2Z6721-429	PLATE FT-429 (for Mast Bracket MP-50)	1	-------	-------	-------	-------	-------	*
	Add for Installation in Car, Half-track (M2)							
3E1509	CORD CD-509: 8′ long; (for power cable)	1	-------	*	*	-------	-------	*
3E1605-6.5	CORD CD-605: 78″ long (for Headset HS-30)	1	-------	*	*	-------	-------	*
6D15050-V10	INSTRUCTIONS: installation	1	-------	-------	*	*	*	*
3H3947( )	MOUNTING FT-317-(*)	1	-------	-------	-------	-------	-------	*
2A2090-60	MAST BASE BRACKET MP-60	1	-------	-------	-------	-------	-------	*
2Z6721-418	SUPPORT FT-418	1	-------	-------	-------	-------	-------	*
	Add for Installation in Carrier, Personnel, Half-track (M3)							
3E1509	CORD CD-509: 8′ long; (for power cable)	1	-------	*	*	-------	-------	*
3E1605-6.5	CORD CD-605: 78″ long; (for Headset HS-30)	1	-------	*	*	-------	-------	*
2Z4648	FRAME FM-48	1	-------	-------	-------	-------	-------	*
6D15150-V12	INSTRUCTIONS: installation	1	-------	-------	*	*	*	*
2A2090-54	MAST BASE BRACKET MP-54	1	-------	-------	-------	-------	-------	*
	Add for Installation in Half-track, Personnel Carrier (M5)							
3E1509	CORD CD-509: 8′ long; (for power cable)	1	-------	*	*	-------	-------	*
3E1605-6.5	CORD CD-605: 78″ long; (for Headset HS-30)	1	-------	*	*	-------	-------	*
2Z4648	FRAME FM-48	1	-------	-------	-------	-------	-------	*
6D12510( )-V27	INSTRUCTIONS: installation	1	-------	*	*	*	*	*
2A2090-54	MAST BASE BRACKET MP-54	1	-------	-------	-------	-------	-------	*
	Add for Installation in Car, Half-track M9A1							
3E1509	CORD CD-509: 8′ long; (power cable)	1	-------	*	*	-------	-------	*
3E1605-6.5	CORD CD-605: 78″ long; (for Headset HS-30)	1	-------	*	*	-------	-------	*
6D15600-V60	INSTRUCTIONS: installation	1	-------	-------	*	*	*	*
3H3947( )	MOUNTING FT-317-(*)	1	-------	-------	-------	-------	-------	*
	Add for Installation in Carriage, Motor, 75 mm Howitzer (M8)							
2Z9299-206	BOX TM-206: (antenna terminal)	1	-------	-------	*	-------	-------	*

* Indicates stock available.

34.1. Maintenance Parts List for Radio Set SCR-510-(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR-510-(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2Z2651-423	CLAMP MC-423: (for Mast Section MS-51)	1		*				*
	3E1307A-5.5	CORD CD-307-A: 65″ long; (for Headset HS-30)	1		*	*			*
	3E1318A	CORD CD-318A: (for Microphone T-45)	1		*				*
	3E11636	CORD CD-689			*	*			*
	3E1509	CORD CD-509: 8′ long; (power cable)	1		*	*			*
	3E1604	CORD CD-604: 6″ long; (for Headset HS-30)	1			*			*
	3E16368	CORD CD-636: (coaxial cable; antenna lead-in)	1			*			*
	6D12510( )-V28	INSTRUCTIONS: installation	1			*	*	*	*
	3G601	INSULATOR IN-101: (lead-in)	1			*			*
	2A2351	MAST SECTION MS-51	1			*	*		*
	2B1645	MICROPHONE T-45: (component)	1		*	*	*	*	*
	2B1589/1	SHIELD: breath; (for Microphone T-45)	1		*	*	*	*	*
		Add for Installation in Carriage, Motor 75-mm Howitzer (T-30)							
	2Z9299-206	BOX TM-206: (antenna terminal)	1			*			*
	2Z2651-423	CLAMP MC-423: (for Mast Section MS-51)	1		*				*
	3E1605-6.5	CORD CD-605: 78″ long; (for Headset HS-30)	1		*	*			*
	3E1636	CORD CD-636: (coaxial cable, antenna lead-in)	1			*			*
	3E2218	CORDAGE CO-218: 22′ 4-conductor; one-shielded; (interphone control box cable).	1			*			*
	6D12510( )-V19	INSTRUCTIONS: installation	1			*	*		*
	3E1689	CORD CD-689	1		*	*			*
	2C1738( )	INTERPHONE CONTROL BOX BC-606-(*): (component).	1			*	*		*
	2A2351	MAST SECTION MS-51	1			*	*		*
	2Z7090.6	PLATE SPECIAL: SC-A-5284 for Interphone Control Box BC-606.	1						*
	2Z7155	PLUG PL-55: (headset); (used with Cordage CO-218 and Interphone Control Box BC-606).	1			*	*		*

2Z7168	PLUG PL–68: (Microphone; used with Cordage CO–218 and Interphone Control Box BC–606).	1	------	------	*	*	------	*
	Add for Installation in Carrier, 81-mm Motor, Half-track M4 and M4A1							
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1	------	------	*	*	------	*
6D12510( )–V21	INSTRUCTIONS: installation	1	------	------	*	*	*	*
2A2090–60	MAST BRACKET MP–60	1	------	------	------	------	------	*
2B1643	MICROPHONE T–45	1	------	*	*	*	*	*
	Add for Installation in Truck, ¼-ton, 4 x 4							
2Z6721–419	BRACKET FT–419: (for Mounting FT–250)	1	------	------	------	------	------	*
2Z1203–420	BRACKET FT–420: (for Mounting FT–250)	1	------	------	------	------	------	*
2Z6721–422	BRACKET FT–422: (brush guard)	1	------	------	------	------	------	*
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1	------	*	*	------	------	*
6D15400–V26	INSTRUCTIONS: installation	1	------	------	*	*	*	*
2A2090–50	MAST BASE BRACKET MP–50	1	------	------	------	------	------	*
2Z6721–429	REINFORCING PLATE FT–429: (for Mast Base Bracket MP–50).	1	------	------	------	------	------	*
	Add for Installation in Truck, ¼-ton, 4 x 4 Amphibian							
3E1509	CORD CD–509: 8′ long; (power cable)	1	------	*	*	------	------	*
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1	------	*	*	------	------	*
6D15300–V11	INSTRUCTIONS: installation	1	------	------	*	*	*	*
2A2090–60	MAST BASE BRACKET MP–60	1	------	------	------	------	------	*
3H3947	MOUNTING FT–317–( )	1	------	------	------	------	------	*
2Z5725–456	INSTALLATION KIT MC–450	1	------	*	*	*	*	*
	Add for Installation in Truck, ¾-ton, 4 x 4 Command							
2Z1250.27	BRACKET: (SC–A–7110)	1	------	------	------	------	------	*
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1	------	*	*	------	------	*
6D15075–V13	INSTRUCTIONS: installation	1	------	------	*	*	*	*
	Add for Installation in Truck, ¾-ton, 4 x 4 Carryall							
2Z9299–206	BOX TM–206: (antenna terminal)	1	------	------	*	------	------	*
2Z2651–423	CLAMP MC–423: (for Mast Section MS–51)	1	------	*	------	------	------	*
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1	------	*	*	------	------	*

* Indicates stock available.

34.1. Maintenance Parts List for Radio Set SCR–510–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR–510–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*
	2Z4643	FRAME FM–43	1						*
	6D15100–V14	INSTRUCTIONS: installation	1			*	*	*	*
	3G601	INSULATOR IN–101	1			*			*
	2A2351	MAST SECTION MS–51	1			*	*		*
	3E1689	CORD CD–689	1		*	*			*
	2A2090–50	MAST BASE BRACKET MP–50	1		*	*			*
		Add for Installation in Truck, 2½-ton, 6 x 6, Cargo							
	2Z9299–206	BOX TM–206: (antenna terminal)	1			*			*
	3H3942/B1	BRACKET: (SC–A–7111)	1		*				*
	2Z2651–423	CLAMP MC–423: Mast Section (for MS–51)	1		*				*
	3E1509	CORD CD–509: (for power unit)	1		*	*			*
	3E1605–6.5	CORD CD–605: 78″ long (for Headset HS–30)	1		*	*			*
	3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*
	6D14225–V35	INSTRUCTIONS: installation	1			*	*	*	*
	3G611	INSULATOR IN–111	1			*			*
	2A2090–50	MAST BASE BRACKET MP–50	1						*
	2A2351	MAST SECTION MS–51	1			*	*		*
	3H3947( )	MOUNTING FT–317–A	1						*
	2Z6721–429	REINFORCING PLATE FT–429: (for Mast Base Bracket MP–50).	1						*
	3E1689	CORD CD–689	1		*	*			*
	3H6712	VIBRATOR VB–12	1		*	*	*	*	*
		Add for Installation in Multiple Gun Motor Carriage M15							
	5C2806	BOX TM–206: (antenna terminal)	1			*			*
	2Z9299–206	BRACKET	1						*
	2Z2651–423	CLAMP MC–423: (for MS–51)	1		*				*
	3Z1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1		*	*			*
	3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*

6D12510–V66	INSTRUCTIONS: installation	1			*	*	*	*
2A2090–50	MAST BASE BRACKET MP–50	1						*
2A2351	MAST SECTION MS–51	1			*	*		*
2Z1250.28	BRACKET: (SC–A–8688)	1						*
2Z7040.11	BRACKET: (SC–A–8689)	1						*
3E1689	CORD CD–689	1		*	*			*
	Add for Installation in Car, Half-track M2A1							
3E1509	CORD CD–509: (for power unit)	1		*	*			*
3E1605–6.5	CORD CD–506: 78″ long; (for Headset HS–30)	1		*	*			*
6D15050–V10	INSTRUCTIONS: installation	1			*	*	*	*
3H3947	MOUNTING FT–317–(*)	1						*
	Add for Installation in Carrier, Personnel, Half-track M3A1							
6Z3147–1	CONNECTOR AND BONDNUT: (for Cordage CO–218) Appleton No. 61004 and Bondnut BL–50 respectively.	1			*	*	*	*
3E1509	CORD CD–509: (for power unit)	1		*	*			*
3E1605–6.5	CORD CD–605: 78″ long; (for Headset HS–30)	1		*	*			*
3E2218	CORDAGE CO–218: 14 ft; (for connecting Interphone Control Box BC–606 to Radio Receiver and Transmitter BC–620).	1			*			*
2Z4648	FRAME FM–48	1				*	*	*
6D15105–V68	INSTRUCTIONS: installation	1				*	*	*
2C1738	INTERPHONE CONTROL BOX BC–606–(*): (component).	1				*	*	
2A2090–54	MAST BRACKET MP–54	1						*
2Z7155	PLUG PL–55	1				*	*	*
2Z7168	PLUG PL–68	1				*	*	
	Add for Installation in Combination Gun Motor Carriage M15A1							
2Z9299–206	BOX TM–206: (antenna terminal)	1			*			*
2Z2651–423	CLAMP MC–423: (for Mast Section MS–51)	1		*				*
3E1605–6 .5	CORD CD–605: 78″ long; (for Headset HS–30)	1		*	*			*
3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*
6D12510–V64	INSTRUCTIONS: installation	1			*	*	*	*

* Indicates stock available.

34.1. Maintenance Parts List for Radio Set SCR–510–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per SCR–510–(*)	Running spares	Orgn stock	3d echn	4th echn	5th echn	Depot stock
	3G621	INSULATOR IN–121	1			*			*
	2A3351	MAST SECTION MS–51	1			*	*		*
	2B1567	MICROPHONE COVER M–367			*	*			*
		Add for Installation in Armored Utility Car M20							
	3E1605–6.5	CORD CD–605–A: 78″ long; (for Headset HS–30)	1		*	*			*
	3E1636	CORD CD–636: (coaxial antenna lead-in)	1			*			*
	3E1689	CORD CD–689			*	*			*
	6D15425–V63	INSTRUCTIONS: installation	1			*	*	*	*
	3G621	INSULATOR IN–121: 1⅛″ long	2			*			*
	2A2351	MAST SECTION MS–51	1			*	*		*
	2Z2651–423	CLAMP MC–423: (for Mast Section MS–51)	1		*				*
	2Z9299–206	TERMINAL BOX TM–206	1						*
		Add for Installation in Truck, 1½-ton 4 x 4 (K–51)							
	2Z6721–424	BRACKET FT–424: (for Mounting FT–250, Mounting SC–A–8140).	1						*
	2Z6721–426	BRACKET FT–426: (SC–A–8141)	1						*
	2Z1203–427	BRACKET FT–427	1						*
	2Z1203–428	BRACKET FT–428: (SC–A–8143)	1						*
	3E1689	CORD CD–689			*	*			*
	3E1509	CORD CD–509: (for power unit)	1		*	*			*
	3E1605–6.5	CORD CD–605: 78″ long (for Headset HS–30)	1		*	*			*
	6Z6958	FOOTMAN'S LOOP: North and Judd; 1 japanned No. 1165; (for power unit).	8						*
	6D15425–V62	INSTRUCTIONS: installation	1			*	*	*	*
	3G601	INSULATOR IN–101: 1⅝″ long	1			*			*
	2A2090–50	MAST BRACKET MP–50	1						*
	2Z9050–5	MOUNTING STRAP ST–51: (for power unit, SC–A–8147).	4		*				*

2Z9050–52	MOUNTING STRAP ST–52: (for power unit, SC–A–8148).	4	-------	*	-----	-----	-----	*
	Add for Installation in 81-mm Chemical Motor Carrier T–19							
3E1318A	CORD CD–318–A	1	-------	*	*	-----	-----	*
3G621	INSULATOR IN–121	2	-------	-----	*	-----	-----	*
281645	MICROPHONE T–45: (component)	1	-------	*	*	*	*	*
	Add for Installation in 4.2 Chemical Motor Carrier T–21							
3E1318A	CORD CD–318–A	1	-------	*	*	-----	-----	*
2B1645	MICROPHONE T–45: (component)	1	-------	*	*	*	*	*
	Add for Installation in Personnel Carrier, Half-track M5A1							
6Z31471	CONNECTOR AND BONDNUT: Appleton Elec Co No. 61004 and No. BL–50, respectively.	1	-------	-----	*	*	*	*
3E1509	CORD CD–509	1	-------	*	*	-----	-----	*
3E2218	CORDAGE CO–218: 14′ long	14′	-------	-----	*	-----	-----	*
2Z4648	FRAME FM–48	1	-------	-----	-----	-----	-----	*
2C1738	INTERPHONE CONTROL BOX BC–606: (component).	1	-------	-----	-----	-----	-----	*
2A2090–54	MAST BASE BRACKET MP–54	1	-------	----	-----	-----	-----	*
2Z7155	PLUG PL–55	1	-------	-----	*	*	-----	*
2Z7168	PLUG PL–68	1	-------	-----	*	*	-----	*

* Indicates stock available.

34.2. Maintenance Parts List for Radio Receiver and Transmitter BC–620–(*).

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per BC–620–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2A2600	BLOCK AND PIN ASSEMBLY: antenna mounting				•	•	•	•
	1F50G1–2	CABLE AND CONNECTOR: 8-pin plug connector with cable clamp, 12″ 8-conductor rubber covered, and mounting bushing.				•	•	•	•
C1	3D9010–25	CAPACITOR: fixed; ceramic; 10-mmf, ±10%, 1,000 v d-c (working); negative temperature coefficient.	1			•	•	•	•
C2	3D9035V–4	CAPACITOR: variable; air; 35-mmf max; (rotor wiper lug on right-hand side).	1			•	•	•	•
C3	3D9035V–2	CAPACITOR: variable; air; 35-mmf max; (rotor wiper lug on left-hand side).	1			•	•	•	•
C4	3D9005V–2	CAPACITOR: variable; air; 5-mmf max; (rotor wiper lug on left-hand side).	2			•	•	•	•
C5		CAPACITOR: same as C4							
C6	3D9050V–30	CAPACITOR: variable; air; 50-mmf max; (rotor wiper lug on right-hand side).	2			•	•	•	•
C7	3D9050V–29	CAPACITOR: variable; air; 50-mmf max; (rotor wiper lug on left-hand side).	2			•	•	•	•
C8	3D9022–1	CAPACITOR: fixed; ceramic; 22-mmf ±5%; 1,000 v d-c (working), negative temperature coefficient.	1			•	•	•	•
C9	3DA10–78	CAPACITOR: fixed; mica; 10,000-mmf + 14%–6%; 300 v d-c (working).	11			•	•	•	•
C10	3DA1–48	CAPACITOR: fixed; mica; 1,000-mmf + 14%–6%; 300 v d-c (working).	3			•	•	•	•
C11	3DA5–24	CAPACITOR: fixed; mica; 5,000-mmf + 14%–6%; 300 v d-c (working).	2			•	•	•	•
C12	3D9075V–1	CAPACITOR: variable; air; 75-mmf max; (rotor lug on right-hand side).	2			•	•	•	•
C13	3D9075V–2	CAPACITOR: variable; air; 75-mmf max; (rotor lug on left-hand side).	2			•	•	•	•
C14	3D9050–62	CAPACITOR: fixed; ceramic; 50-mmf ±5%; (negative temperature coefficient 0.0001 mmf/mmf/° C ± 15%).	2			•	•	•	•

C15		CAPACITOR: same as C14								
C16	3D9250-24	CAPACITOR: fixed; mica; 250-mmf + 14%-6%; 400 v d-c (working).	1			*	*	*	*	
C17		CAPACITOR: same as C11								
C18		CAPACITOR: same as C11								
C19	3D9050-35	CAPACITOR: fixed; mica; 50-mmf + 14%-6%; 400 v d-c (working).	1			*	*	*	*	
C20	3D9140V-5	CAPACITOR: variable; air; 140-mmf max; (rotor wiper lug on right-hand side).	1			*	*	*	*	
C21	3D9140V-6	CAPACITOR: variable; air; 140-mmf max; (rotor wiper lug on left-hand side).	1			*	*	*	*	
C22	3D9140V-6	CAPACITOR: fixed; ceramic; 80-mmf ± 2%; (negative temperature coefficient 0.0001 mmf/mmf/° C).	1			*	*	*	*	
C23	3DA1-81	CAPACITOR: fixed; mica; 1,000-mmf ± 5%; 200 v d-c (working).	1			*	*	*	*	
C25		CAPACITOR: same as C11								
C26		CAPACITOR: same as C11								
C27	3D9250-25	CAPACITOR: fixed; mica; 250-mmf ± 5%; 300 v d-c (working).	1			*	*	*	*	
C28	3D9050-36	CAPACITOR: fixed; mica; 50-mmf ± 5%; 300 v d-c (working).	2			*	*	*	*	
C29	3D9500-46	CAPACITOR: fixed; mica; 500-mmf + 14%-6%; 400 v d-c (working).	4			*	*	*	*	
C30	3D9005-20	CAPACITOR: fixed; paper; 0.5-mf ± 20%; 200 v d-c (working); (shielded and oil-filled; mounting lugs attached).	1			*	*	*	*	
C31	3DB25-12	CAPACITOR: electrolytic; 25-mf 25 v d-c (working); (strap mounting).	1			*	*	*	*	
C32		CAPACITOR: same as C11								
C33		CAPACITOR: same as C29								
C34		CAPACITOR: same as C11								
C35		CAPACITOR: same as C28								
C36		CAPACITOR: same as C10								
C37		CAPACITOR: same as C6								
C38		CAPACITOR: same as C7								
C39		CAPACITOR: same as C10								
C40	3D9025-20	CAPACITOR: fixed; mica; 25-mmf ± 5%; 300 v d-c (working).	1			*	*	*	*	

* Indicates stock available.

34.2. Maintenance Parts List for Radio Receiver and Transmitter BC–620–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per BC–620–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
C41		CAPACITOR: same as C12							
C42		CAPACITOR: same as C13							
C43		CAPACITOR: same as C11							
C44		CAPACITOR: same as C11							
C45		CAPACITOR: same as C11							
C46	3D9020–11	CAPACITOR: fixed; ceramic; 20-mmf ± 5%; 1,000 v d-c (working); (negative temperature coefficient 0.0001 mmf/mmf/°C + 0.0003).	6			*	*	*	*
C47		CAPACITOR: same as C11							
C48		CAPACITOR: same as C46							
C49	3DA130–1	CAPACITOR: fixed; paper; 0.13-mf ± 20%; 100 v d-c (working); (oil filled).	3			*	*	*	*
C50		CAPACITOR: same as C29							
C51		CAPACITOR: same as C46							
C52	3D411	CAPACITOR: fixed; paper; 250,000-mmf ± 20%; 200 v d-c (working); (oil-filled).	2			*	*	*	*
C53		CAPACITOR: same as C46							
C54		CAPACITOR: same as C49							
C55		CAPACITOR: same as C46							
C56		CAPACITOR: same as C52							
C57		CAPACITOR: same as C46							
C58	3D100–46	CAPACITOR: fixed; mica; 100-mmf + 14%–6%; 400 v d-c (working).	1			*	*	*	*
C59	3DA50–43	CAPACITOR: fixed; paper; 50,000-mmf ± 20%; 600 v d-c (working).	1			*	*	*	*
C60		CAPACITOR: same as C11							
C61	3D9060V	CAPACITOR: variable; air; dual-section; 28-mmf min; 60-mmf max.	1			*	*	*	*
C62	3D9100–81	CAPACITOR: fixed; mica; 100-mmf ± 5%; 300 v d-c (working).	1			*	*	*	*
C63		CAPACITOR: same as C61							

C64	3D9025-35	CAPACITOR: fixed; ceramic; 25-mmf; 1,000 v d-c (working); (negative temperature coefficient 0.00015 mmf/mmf/°C).	1			*	*	*	*
C65		CAPACITOR: same as C9							
C66		CAPACITOR: same as C29							
C67		CAPACITOR: same as C49							
L1	2C5360A/A4	COIL AND SHIELD ASSEMBLY: (antenna loading)	1			*	*	*	*
L2, C8, C9, R1, R2	2C5360A/A5	COIL AND SHIELD ASSEMBLY: (power-amplifier grid, with capacitors and resistors).	1			*	*	*	*
L3, C14, C15, R4.	2C5360A/A6	COIL AND SHIELD ASSEMBLY: (buffer grid, with capacitors and resistors).	1			*	*	*	*
L4, C22	2C5360A/A7	COIL AND SHIELD ASSEMBLY: (transmitter oscillator grid with capacitors and resistors).	1			*	*	*	*
L5	2C5360A/A8	COIL AND SHIELD ASSEMBLY: mixer grid	1			*	*	*	*
L6	2C5360A/A9	COIL AND SHIELD ASSEMBLY: receiver oscillator grid.	1			*	*	*	*
CH1	3C362	COIL: r-f choke; single layer solenoid	2			*	*	*	*
CH2	3C362-1	COIL: r-f choke; 3-pie	4						
CH3		COIL: r-f choke; same as CH2							
CH4		COIL: r-f choke; same as CH1							
CH5		COIL: r-f choke; same as CH2							
CH6	3C549	COIL: r-f choke; shielded; (microphone, hash)	1			*	*	*	*
CH7	3C362-12	COIL: high L r-f choke; single layer solenoid	1			*	*	*	*
CH8		COIL: choke; same as CH2							
CH9	3C362-13	COIL: choke; filament; single-pie	1			*	*	*	*
	2Z1923	CLIP: catch; large; 2 5/16" long	4			*	*	*	*
	2Z3097-2	CONNECTOR AND CLAMP: (8-pin connector with cable clamps only).	1			*	*	*	*
	2Z3400-153	COVER BG-153: canvas	1			*	*	*	*
	2Z3352	COVER: jack; neoprene; (weatherproofing cover for phone and microphone jacks).	2			*	*	*	*
	2G251	DESSICATOR: silica jell	1		*	*	*	*	*
	3Z2587.1	FUSE: ¼ amp; Littelfuse type 3AG	1			*	*	*	*
	2C5379A/G1	GASKET: neoprene; front panel	1			*	*	*	*
	2C5379/AG2	GASKET: neoprene; meter	1			*	*	*	*
	2A245A/G1	GASKET: block insulator; (antenna insulator gasket)	1						

* Indicates stock available.

34.2. Maintenance Parts List for Radio Receiver and Transmitter BC–620–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per BC–620–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2Z4922–1	HANDLE: carrying; leather; (with mounting screws)	1			*	*	*	*
	3G1838	INSULATOR: phenolic plate; (antenna mounting block)	1			*	*	*	*
J2	2Z5570	JACK: headphone; 2-contact	1			*	*	*	*
J1	2Z5572	JACK: microphone; 3-contact	1			*	*	*	*
	2Z5829	KNOB: control	3			*	*	*	*
	2Z7229	PLUG: 5-pin; (on internal battery)	1			*	*	*	*
	2Z7229–1	PLUG: 8-pin (connector on power and control cable plug).	1			*	*	*	*
SW12, SW13	2Z7262.2	POTENTIOMETER: 1-megohm; (volume control includes SW12 and SW13 on back).	1			*	*	*	*
R1	3Z6270–2	RESISTOR: carbon; 2,700-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE272K.	1			*	*	*	*
R2	3Z6010–39	RESISTOR: carbon; 100-ohm ± 5%; ½-watt; insulated; American War Standard type RC2AE101J.	1			*	*	*	*
R3	3Z6005A6	RESISTOR: wire; 56-ohm ± 10%; ½-watt; insulated; A.W.S. type BW-½.	1			*	*	*	*
R4	3Z6622–2	RESISTOR: carbon; 22,000-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE223K.	2			*	*	*	*
R5	3Z6627–1	RESISTOR: carbon; 27,000-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE273K.	2			*	*	*	*
R6	3Z6330–1	RESISTOR: carbon; 3,300-ohm ± 10%; ½-watt; insulated A.W.S. type RC20AE332K.	2			*	*	*	*
R7	3Z5606–3	RESISTOR: carbon; 5,600-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE562K.	1			*	*	*	*
R8	3Z6010–18	RESISTOR: wire; 100-ohm ± 10%; ½-watt; insulated; IRC type BW–½.	1			*	*	*	*
R9		RESISTOR: same as R5							
R10	3Z6747–10	RESISTOR: carbon; 470,000-ohm ± 10%; ½-watt; insulated A.W.S. type RC20AE474K.	5			*	*	*	*
R11	3Z6656–1	RESISTOR: carbon; 56,000-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE563K.	1			*	*	*	*

R12	3Z5992-1	RESISTOR: wire; 2.2-ohm ± 10%; ½-watt; insulated; IRC type BW-½.	1			*	*	*	*
R13	3Z6010-46	RESISTOR: wire; 100-ohm ± 10%; 1-watt; insulated; IRC type BW-½.	1			*	*	*	*
R14	3Z4534	RESISTOR: carbon; 1-meg ± 10%; ½-watt; insulated; A.W.S. type RC20AE105K.	5			*	*	*	*
R15	3Z5991-4	RESISTOR: wire; 1-ohm ± 10%; ½-watt; IRC type BW-½.	1			*	*	*	*
R16	3Z6620-11	RESISTOR: carbon; 20,000-ohm ± 5%; 1-watt; insulated; A.W.S. type RC31AE203J.	1			*	*	*	*
R17		RESISTOR: same as R14							
R18		RESISTOR: same as R10							
R19		RESISTOR: same as R14							
R20		RESISTOR: same as R4							
R21		RESISTOR: same as R10							
R22		RESISTOR: same as R10							
R23	3Z6047	RESISTOR: carbon; 470-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE471K.	4			*	*	*	*
R24	3Z6727	RESISTOR: carbon; 270,000-ohm ± 10%; ½-watt; insulated; A.W.S. type RC2AE274K.	4			*	*	*	*
R25		RESISTOR: same as R6.							
R26	3Z6020-7	RESISTOR: wire; 200-ohm ± 5%; ½-watt; insulated; IRC type BW-½.	1			*	*	*	*
R27		RESISTOR: same as R10 and part of T4							
R28		RESISTOR: same as R23							
R29		RESISTOR: same as R10							
R30		RESISTOR: same as R14							
R31	3Z4550	RESISTOR: carbon; 100,000-ohm ± 10%; ½-watt; insulated; A.W.S. type RC20AE104K.	2			*	*	*	*
R32		RESISTOR: same as R23							
R33		RESISTOR: same as R31							
R34		RESISTOR: same as R23							
R35		RESISTOR: same as R14							
R36		RESISTOR: same as R23							
R37		RESISTOR: same as R23							
R38		RESISTOR: same as R23							
R39	2Z7262.2	POTENTIOMETER: 1-meg; (volume control)	1			*	*	*	*

* Indicates stock available.

34.2. Maintenance Parts List for Radio Receiver and Transmitter BC–620–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per BC–620–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
SO2	2Z8678	SOCKET: 2-crystal receptacle	1			*	*	*	*
SO1	2Z8637.1	SOCKET: tube; molded-loctal	13			*	*	*	*
	6L4910–32.16N	STUD: antenna-mounting; (used on antenna mounting block).	1			*	*	*	*
SW1	3Z9825–23	SWITCH: channel; ganged; 3-section; 2-position; rotary.	1			*	*	*	*
SW2		SWITCH: same as SW1							
SW3		SWITCH: same as SW1							
SW4		SWITCH: same as SW1							
SW5		SWITCH: same as SW1							
SW6		SWITCH: same as SW1							
SW7		SWITCH: same as SW1							
SW8		SWITCH: same as SW1							
SW9	3Z9827.25	SWITCH: metering; rotary; 2-pole, 4-position	1			*	*	*	*
SW10	3Z9859	SWITCH: toggle; single-pole, single-throw; (with plate and mounting nuts).	2			*	*	*	*
SW11		SWITCH: same as SW10							
T1	2Z9978–7	TRANSFORMER: power amplifier; (plate, 13 to 1)	1			*	*	*	*
T2	2Z9666A	TRANSFORMER C–66–A: microphone	1			*	*	*	*
T3	2C5360A/T3	TRANSFORMER AND SHIELD ASSEMBLY: (1st if, with capacitors and resistors C46, C48, R21, and R22).	1			*	*	*	*
T4	2C5360A/T3	TRANSFORMER AND SHIELD ASSEMBLY: (2d if, with capacitors and resistors C51, C53, R27).	1			*	*	*	*
T5	2C5360A/T4	TRANSFORMER AND SHIELD ASSEMBLY: (3d if, with capacitors and resistors C55, C57, C58, R29, R30, and R31).	1			*	*	*	*
T6	2C5360A/T5	TRANSFORMER AND SHIELD ASSEMBLY: (discriminator, with capacitors C62, C69, C70, C71, and C72).	1			*	*	*	*
T7	2Z9662	TRANSFORMER C–62: output	1			*	*	*	*

M1	3F7371	VOLTMETER IS–171: d–c; 0–3 volt; with luminous mark between 2 and 2.1; 2½-inch flange; flush mounting.	1			*	*	*	*
	6150512	WASHER: extruded; fiber; (jack-insulating)	2			*	*	*	*
	2A245A/W1	WIPER: antenna; phosphor-bronze	1			*	*	*	*
		General hardware							
	613106–32.1	NUT: brass; hex.; No. 6–32; nickel-plated				*			*
	6L6632–16.7	SCREW: machine; brass; binderhead; No. 6–32; 1″; nickeled.				*			*
	6L6632–6.7	SCREW: machine; brass; binderhead; No. 6–32; ⅜″; nickeled.				*			*
	6L6632–6.5	SCREW: machine; brass; roundhead; No. 6–32; ⅜″; nickeled.				*			*
	6L6632–8.9B	SCREW: machine; brass; binderhead; No. 6–32; ½″; black.				*			*
	6L6632–28.9	SCREW: machine; brass; binderhead; No. 6–32; 1¾″; nickeled.				*			*
	6L6432–3.9	SCREW: machine; brass; binderhead; No. 4–32; 3/16″; nickeled.				*			*
	6L6432–3.5	SCREW: machine; brass; roundhead; 3/16″; nickeled				*			*
	6L6832–14.9	SCREW: machine; brass; binderhead; No. 8–32; ⅞″; nickeled.				*			*
	6L7032–8.5	SCREW: machine; brass; roundhead; No. 10–32; ½″; nickeled.				*			*
	6L7032–8.7	SCREW: machine; brass; flathead; No. 10–32; ½″; nickeled.				*			*
	6L70006	WASHER: lock; steel; external; No. 6				*			*

* Indicates stock available.

34.3. Maintenance Parts List for Case CS–79–(*).

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per CS–79– (*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
		Case CS–79–( )							
	1F50G1.3	CABLE AND CONNECTOR ASSEMBLY: complete with 8-pin socket and shell, Y cable, battery plugs, housing bushing, and gasket.	1		*	*	*	*	*
	2Z1923–1	CLIP: cover catch; small	2			*	*	*	*
	2Z2727	CLIP: hold-down; large	4				*	*	*
	2Z2727–1	CLIP: hold-down; small	2				*	*	*
	2Z1923	CLIP: unit catch; large	4			*	*	*	*
	2Z4922–1	HANDLE: carrying; leather; with mounting screws	1			*	*	*	*
	2Z7229–2	PLUG: 4-prong; black phenolic	1			*	*	*	*
	2Z7229–3	PLUG: 5-prong; black phenolic	1			*	*	*	*
	2Z8799–240	SOCKET AND SHELL: 8-pin; (cable connector from battery supply).	1			*	*	*	*

* Indicates stock available.

34.4. Maintenance Parts List for Power Unit PE–97–(*).

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per PE–97–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	3E4300–1	CABLE AND CONNECTOR ASSEMBLY (8-pin socket connector with cable clamp and 2-ft 8-conductor cable, Radio Receiver and Transmitter BC–620–A to Power Unit PE–97–(*)).	1			*	*	*	*
	3E4300	CABLE AND LUGS ASSEMBLY: (10-ft rubber-covered, 4-conductor cable; lugs marked; cord battery connector).	1			*	*	*	*
C1	3DA500–39	CAPACITOR: fixed; paper; 500,000-mmf + 14%–6%; 200 v d-c (working); shielded; oil-filled.	1			*	*	*	*
C2	3K4010311	CAPACITOR: fixed; mica; 10,000-mmf; ± 10% 300 v d-c (working).	6			*	*	*	*
C3		CAPACITOR: same as C2							
C4		CAPACITOR: same as C2							
C5		CAPACITOR: same as C2							
C6	3DA5–24	CAPACITOR: fixed; mica; 5,000-mmf + 14%–6%; 300 v d-c (working).	5			*	*	*	*
C7		CAPACITOR: same as C6							
C8		CAPACITOR: same as C2							
C9	3DB1000–1	CAPACITOR: electrolytic; 1,000-mf + 150%–10%; 15 v d-c (working).	1			*	*	*	*
C10	3D403A	CAPACITOR: electrolytic; dual; 20-mf and 20-mf + 150% – 10%; 400 v d-c (working); plug-in type.	1			*	*	*	*
C11	3DA20–18	CAPACITOR: fixed; paper; 20,000-mmf + 14%–6%; 1,600 v d-c (working); oil-filled.	1			*	*	*	*
C12		CAPACITOR: same as C2							
	2Z1923	CLIP: catch; large; 2 5/16" long	4			*	*	*	*
	2Z1923–1	CLIP: catch; small; 1½" long	2			*	*	*	*
CH1	3C362–3	COIL: r-f choke	2			*	*	*	*

* Indicates stock available.

34.4. Maintenance Parts List for Power Unit PE–97–(*). (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per PE–97–(*)	Running spares	Orgn stock	3d echl	4th echl	5th echl	Depot stock
CH2		COIL: same as CH1							
CH3	3C362–4	COIL: choke; (A filter; 2 identical units in can)	1			*	*	*	*
CH4	3C362–1	COIL: r-f choke; 3-pie	1			*	*	*	*
CH5	3C362–5	COIL: choke; (B filter)	1			*	*	*	*
	2Z3097	CONNECTOR: cable; 8-prong female	1			*	*	*	*
F1	3Z2606.3	FUSE: 6-amp; 250-volt; tubular; glass-inclosed	1			*	*	*	*
	3H4300–117C/H3	HANDLE: leather; with mounting screws	1			*	*	*	*
	2Z865.3	MOUNTING WAFER: for electrolytic capacitor	1			*	*	*	*
R1	3Z6020–20	RESISTOR: fixed; carbon; 200-ohm ± 10%; 1-watt; not insulated.	2			*	*	*	*
R2		RESISTOR: same as R1							
R3	3Z6002–20	RESISTOR: fixed; wire; 20-ohm ± 10%; 1-watt; insulated.	1			*	*	*	*
R4	3Z5984	RESISTOR: fixed; wire; 0.4-ohm ± 5%; 5-watt; insulated.	1			*	*	*	*
R5	3Z5999	RESISTOR: fixed; wire; 9.8-ohm ± 5%; 10-watt; insulated.	1			*	*	*	*
R6	3Z6002B2	RESISTOR: fixed; wire; 22-ohm ± 5%; 10-watt; insulated.	1			*	*	*	*
R7	3Z6150–32	RESISTOR: fixed; wire; 1,500-ohms ± 5%; 10-watt; insulated.	1			*	*	*	*
	2Z8657.3	SOCKET: tube; octal; black phenolic	3			*	*	*	*
	2Z8654.1	SOCKET: tube; 4-prong; black phenolic	1			*	*	*	*
T1	3H5646	TRANSFORMER: power; with changeover links	1			*	*	*	*
V1	3H670[illegible]	VIBRATOR: 4-prong; full-wave; nonsynchronous	1			*	*	*	*

* Indicates stock available.

34.5. Maintenance Parts List for Power Supply Unit PE–120–A.

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per PE–120–A	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	3E4300.1	CABLE AND CONNECTOR ASSEMBLY: 2 feet of 8-conductor, rubber-covered cable; 8-pin socket connector.	1			*	*	*	*
	3E4300	CABLE AND LUGS ASSEMBLY: 4-conductor; unshielded; rubber-covered; 10-foot lengths.	1			*	*	*	*
C1	3DA500–179	CAPACITOR: fixed; paper; 500,000-mmf ± 20%; 100 v d-c (working); encased in brass tubing. See also C2.	2			*	*	*	*
C2		CAPACITOR: same as C1							
C3	3DB1.184	CAPACITOR: fixed; paper; 1-mf ± 20%; 100 v d-c (working).	1			*	*	*	*
C4	3DA10–227	CAPACITOR: fixed; paper; 10,000-mmf + 14%−6%; 300 v d-c (working). See also C6, C8, C11, C12, and C13.	6			*	*	*	*
C5	3DA5–129	CAPACITOR: fixed; paper; 5,000-mmf + 14%−6%; 1,600 v d-c (working).	1			*	*	*	*
C6		CAPACITOR: same as C4							
C7	3DB2.207	CAPACITOR: fixed; paper; 2-mf ± 20; 200 v d-c (working). See also C10.	2			*	*	*	*
C8		CAPACITOR: same as C4							
C9	3DB1000–4	CAPACITOR: fixed; electrolytic; 1,000-mf; 25 v d-c (working).	1			*	*	*	*
C10		CAPACITOR: same as C7							
C11		CAPACITOR: same as C4							
C12		CAPACITOR: same as C4							
C13		CAPACITOR: same as C4							
	2Z1923	CATCH: clip; steel; 2 5/16" long; smooth o-d finish; (for fastening PE–120–A to FT–250).	4			*	*	*	*
	2Z1923–1	CATCH: hold-down clip; small, 1½" long; smooth o-d finish; (for holding case cover closed)	2			*	*	*	*

* Indicates stock available.

34.5. Maintenance Parts List for Power Supply Unit PE–120–A. (Continued.)

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per PE–120–A	Running spares	Orgn stock	3d echn	4th echn	5th echn	Depot stock
	3H4496–120A/C15	CLIP: hold-down; hook-shaped; 1″ wide at top, 13/16″ wide at bottom; (for holding PE–120–A and chassis together).	4						*
	2Z2727–1	CLIP: hold-down; hook-shaped; 7/8″ x 9/16″ x 1/4″; (for holding cover closed).	2						*
	2Z2728	CLIP: loop retainer; spring steel; loop on one end; (holds catch-clip loop when not in use).	4			*	*	*	*
	2Z2728–1	CLIP: vibrator; (grounding clip for vibrator)	1						*
CH1,CH2	3C317–33	COIL ASSEMBLY: choke; A+ and B+ filter. (CH1 and CH2 are combined in one shield).	1			*	*	*	*
RFC1	3C362–32	COIL: r–f choke	1			*	*	*	*
RFC2	3C362–33	COIL: r–f choke	1			*	*	*	*
RFC3	3C362–3	COIL: r–f choke	1			*	*	*	*
F1	3Z1938	FUSE FU–38: 6-amp; 25-v	1	1	*	*	*	*	*
	3ZK3275.4	FUSE-HOLDER: plastic; for 3AG fuse	1			*	*	*	*
	3G1100–35	MOUNTING: wafer; bakelite; (for capacitor)	1			*	*	*	*
P1	2Z7118.34	PLUG: voltage change-over; 8-prong	1			*	*	*	*
R1	3RC30AE821K	RESISTOR: fixed; carbon; 820-ohm ± 10%; 1-watt. See also R2.	2						
R2		RESISTOR: same as R1				*	*	*	*
R3	3RC20AE153K	RESISTOR: fixed; carbon; 15,000-ohm ± 10%; 1/2-watt.	1			*	*	*	*
R4	3Z6100–149	RESISTOR: fixed; wire-wound; 1,000-ohm ±5%; 10-watt.	1			*	*	*	*
R5	3Z5995F6	RESISTOR: fixed; wire-wound; 5.6-ohm ± 5%; 1-watt	1			*	*	*	*
R6	3Z6002E552	RESISTOR: fixed; wire-wound; 25-ohm ±5%; 5-watt	1			*	*	*	*
R7	3Z6005–98	RESISTOR: fixed; wire-wound; 50-ohm ± 5%; 5-watt	1			*	*	*	*
SO1	2Z8659–6	SOCKET: tube; octal	5			*	*	*	*
SO2	2Z3097	SOCKET AND SHELL: 8-contact socket; aluminum shell.	1			*	*	*	*
T1	2Z9625–24	TRANSFORMER: vibrator	1			*	*	*	*

V1B1	3H6712A	VIBRATOR VB–12–A: 6-v; nonsynchronous; single-contact.	1			*	*	*	*
V1B2	3H6713A	VIBRATOR VB–13–A: 12-v; nonsynchronous; single-contact.	1			*	*	*	*
V1B3	3H6711A	VIBRATOR VB–11–A: 24-v; nonsynchronous; single-contact.	1			*	*	*	*
V1	2J1005	TUBE (VT–195) JAN–1005	1	1	*	*	*	*	*
V2	2JOB3/VR90	TUBE (VT–184) JAN–OB3NB–90	1	1	*	*	*	*	*
V3	2V10T1	TUBE: Amperite 10T1; (voltage regulator)	1		*	*	*	*	*

34.6. Maintenance Parts List for Interphone Control Box BC–606–(*).

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per BC–606–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2C1617A/C4	CLAMP: mounting				*	*	*	*
	2C1617A/C3	COVER: dust					*	*	*
	2C1738A/J1	JACK: headset and microphone; 3-conductor				*	*	*	*
	2C4480–683A/K1	KNOB: volume-control; 1″ x ½″				*	*	*	*
	2Z7288–3	POTENTIOMETER: 50,000-ohm				*	*	*	*
	2C6494A/R1	RECEPTACLE AND CAP: magnetic microphone				*	*	*	*
	3Z6200–6	RESISTOR: 2,000-ohm ± 10%; ½-watt				*	*	*	*
	2C4403A/S2	SWITCH: toggle; single-pole; single-throw					*	*	*
	4E9900–700A	TERMINAL STRIP: 8 pairs of contacts							

* Indicates stock available.

34.7. MAINTENANCE PARTS LIST FOR HANDSET TS–13–(*).

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per TS–13–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	3E1494	CORD CD–494	1				*	*	*
	2Z7155	PLUG PL–55	1				*	*	*
	2Z7168	PLUG PL–68	1				*	*	*
	3Z6075–23	RESISTOR	1				*	*	*
	3Z9650	SWITCH ASSEMBLY	1				*	*	*
	6L6440–3 .59	SCREW: machine; brass; flathead; 4–40 x 3/16"	2				*	*	*
	6L6448–3 .9	SCREW: machine; brass; binderhead; 4–48 x 3/16"	2				*	*	*
	6L6540–3 .8	SCREW: machine; brass; binderhead; 5–40 x 3/16"	2				*	*	*

Note: No initial distribution of the following parts will be made on the basis of this list, as Handsets TS–13–( ) are of four manufacturing types, parts for which are not interchangeable.

Sufficient spare handsets are provided in depot and echelon stocks for six months replacement without repairs.

To conserve stocks of repair parts, defective handsets should be allowed to accumulate, and parts requisitioned only as required, for specific manufacturing types.

		Handset TS–13–A (Automatic Electric)							
	4B1109J/20	CAP: receiver	1				*	*	*
	4B1109J/19	CAP: transmitter	1				*	*	*
	4B1109J/12	CONTACT SPRING: receiver; center	1				*	*	*
	4B1109J/13	CONTACT SPRING: receiver; outer	1				*	*	*
	4B1109J/14	CONTACT SPRING: transmitter; center	1				*	*	*
	4B1109J/15	CONTACT SPRING: transmitter; outer	1				*	*	*
	2B613C/2	HANDLE: handset	1				*	*	*
	2B611D/1	RECEIVER UNIT: handset	1				*	*	*
	2B613A/25	SCREW: cord fastening	1				*	*	*
	4B1109J/3	TRANSMITTER UNIT: handset	1				*	*	*

	Handset TS-13-B (Kellogg)								
4B1109K/20	CAP: receiver	*							
2B613B/9	CONNECTING RACK	*							
2B613B/2	HANDLE: handset	*							
2B613B/11	INSERT: brass; round	*							
4B1109K/4	MOUTHPIECE: transmitter	*							
2B611C/1	RECEIVER UNIT: handset	*							
4B1109K/5	RING: clamping; transmitter	*							
2B611B/3	TRANSMITTER UNIT: handset	*							
	Handset TS-13-E (American Microphone Co.)								
4B407-103	CAP: receiver	*							
4B408-102	CAP: transmitter	*							
4B442-142A	CONTACT SPRING: receiver; center	*							
4B442-604	CONTACT SPRING: receiver; outside	*							
4B442-142	CONTACT SPRING: transmitter; center	*							
4B443-141	CONTACT SPRING: transmitter; outside	*							
4B1001	HANDLE: handset	*							
4B3054	RECEIVER UNIT	*							
4B9854	TRANSMITTER UNIT	*							
	Handset TS-13-F (Federal (formerly International))								
4B1109A .11/20	CAP: receiver	*							
4B1109A .6/19	CAP: transmitter	*							
4B1109A .11/12	CONTACT SPRING: receiver; center	*							
4B1109A .6/13	CONTACT SPRING: receiver; outside	*							
2B613F/7	CONTACT SPRING: transmitter; outside	*							
2B613F/8	CONTACT SPRING: transmitter; center	*							
2B613B/4	HANDLE: handset	*							
4B3058	RECEIVER UNIT	*							
4B1109F/3	TRANSMITTER UNIT	*							

* Indicates stock available.

34.8. Maintenance Parts List for Headset HS–30–U.

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per HS–30–U	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2B1300	INSERT M–300	2			*	*	*	*
	3Z10161	TERMINAL TM–161	4				*	*	*
	3Z10163	TERMINAL TM–163	2				*	*	*

34.9. Maintenance Parts List for Microphone T–17.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per T–17	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
		Microphone T–17							
	3E2076A	CORD CO–76–A: 5-foot, 3-conductor	1				*	*	*
	2Z7168	PLUG PL–68	1				*	*	*
	3Z8109	SWITCH SW–109: (for all models except Microphone T–17–D).	1				*	*	*
	3Z10161	TERMINAL TM–161: (terminates cord at plug end)	3				*	*	*

34.10. Maintenance Parts List for Microphone T–45.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per T–45	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2B1859/1	SHIELD: breath	1		*	*	*	*	*
	2B1589	UNIT MICROPHONE MC–419	1				*	*	*

34.11. Maintenance Parts List for Mast Base MP–48 or MP–48–A.

Note. Order maintenance parts by stock number, name, and description. Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per MP–48 or MP–48–A	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2A2088–48/A1	ADAPTER ASSEMBLY: includes Binding Post TM–146; pin; coupling; insert retainer; insert; washer; (for Mast Base MP–48).				*	*	*	*
	3Z246	BINDING POST TM–146: (for Mast Base MP–48)				*	*	*	*
	2A2088–48/C6	CABLE CONNECTOR ASSEMBLY: includes wire plug; soldering plug, Wire W–128, 16½″ long; (for Mast Base MP–48).				*	*	*	*
	2A2088–48/C1	CAP: brass or steel; 1″ diam x ⅝″ high; (cover for plug case).				*	*	*	*
	2A2088–48/C9	CASE: plug; brass or steel; 0.990″ diam x 1⅝″ long				*	*	*	*
	2A2088–48/C7	COLLAR: brass or steel; 1½″ diam x ¾″ long; 15/16″ hole; (for Mast Base MP–48).				*	*	*	*
	2A2088–48A/C1	COLLAR: phenolic; 1¼″ diam; 7/16″ hole; (for Mast Base MP–48–A).				*	*	*	*
	2A2088–48–C4	CONNECTOR: cable; AN 3106–14–3ST plug and AN 3057–6 clamp; (for coaxial cable in Mast Base MP–48)				*	*	*	*
	2A2088–48/R8	INSERT: retainer; (for Mast Base MP–48)				*	*	*	*
	3G618	INSULATOR IN–118				*	*	*	*
	3G1250–60	INSULATOR: ceramic; (for Mast Base MP–48–A)				*	*	*	*
	3Z12076–7	LUG: steel; roll-type; (for Mast Base MP–48–A)				*	*	*	*
	2A2088–48/M1	MAST SOCKET ASSEMBLY: includes upper socket retainer, insulator, lower insulator retainer, plug, Binding Post TM–146; (for Mast Base MP–48).				*	*	*	*
	2A2088–48A/M1	MAST SOCKET ASSEMBLY: includes socket and upper insulator retainer, lower insulator retainer, insulator, hex head screws, asbestos washers; lug, set-screw; (for Mast Base MP–48–A).				*	*	*	*

* Indicates stock available.

34.11. Maintenance Parts List for Mast Base MP–48 or MP–48A. (Continued.)

Note. Order maintenance parts by stock number, name, and description.
Only maintenance parts listed can be requisitioned.

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per MP–48 or MP–48–A	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2A2088–48/P1	PLUG: phenolic; brass or steel; ¾″ across flat, (for Mast Base MP–48).				*	*	*	*
	2A2088–48/R7	RETAINER ASSEMBLY: includes outer spring retainers, inner spring retainers, springs, and setscrews; (for Mast Base MP–48).				*	*	*	*
	2A2088–48A/R1	RETAINER ASSEMBLY: includes spring retainers, springs, split ring, and setscrews; (for Mast Base MP–48–A).				*	*	*	*
	2A2088–48/N1	NUT: brass or steel; (1¾″ across flat; 3/16″ thick; 1⅜″–20 N. S.; for Mast Base MP–48).				*	*	*	*
	6L3522–20–28S	NUT: steel; bonderized; (1¾″ across flat; 3/16″ thick, 1⅜″–20 N. S.; for Mast Base MP–48–A).				*	*	*	*
	6L3969–7	PIN: brass; 0.0595″ diam x 7/16″ long; (for binding post of Mast Base MP–48).				*	*	*	*
	6L6632–6–1.1	SCREW: machine; brass; roundhead; 13/32″ No. 6–32; (for Insulator IN–118).				*	*	*	*
	5B14308–4–1.31	SCREW: set; cup-point; steel; 8–32 x 9/32″ long				*	*	*	*
	6L7968–7.35S	SCREW: set; cone-point; steel; 10–32 x 7/16″ long				*	*	*	*
	2A2088–48/S1	SCREW: machine; steel or brass; ⅛″ ball point; ¼″–28 NF–2 thread; 9/32″ thread length; (for Insulator IN–118).				*	*	*	*
	2A2088–48/W1	WASHER: steel or brass; (3¼″ OD: 1 13/32″ hole; ¼″ thick; two ⅛″ holes; for Mast Base MP–48).				*	*	*	*
	2A2088–48/W2	WASHER: lock; steel; (1⅝″ OD; 1 13/32″ hole; 1/16″ thick, for Mast Base MP–48).				*	*	*	*
	3G1250–3.1	WASHER: ceramic; (15/16″ OD; 7/16″ hole; 3/16″ thick; for Mast Base MP–48–A).				*	*	*	*
	1B128	WIRE W–128: for Mast Base MP–48–A							

2A2088–48/W5	WIRE AND PLUG ASSEMBLY: includes plug case; insulators; wire plug; soldering plug; Wire W–128; rubber washer, (for Mast Base MP–48).				*	*	*	*
6L7945–5.35P	SCREW: set; cone-point; steel; 5/16″–24 x 3/32″ long; (for Mast Base MP–48).				*	*	*	*
6L7949–10.35P	SCREW: set; cone-point; steel; 10–32 x 5/8″ long; (for Mast Base MP–48).				*	*	*	*
6L7965–5.35S	SCREW: set; cone-point; steel; 5/16″–24 x 5/16″ long; (for Mast Base MP–48–A).				*	*	*	*
6L7968–10.131S	SCREW: set; cup-point; steel; 10–32, 1/2″ hex; (for Mast Base MP–48–A).				*	*	*	*
6L7968–5.35S	SCREW: set; cone-point; steel; 10–32 x 5/16″; (for Mast Base MP–48–A).				*	*	*	*
6L58053	WASHER: steel; (3/14″ OD x 3/16″ thick; 1 1/16″ diam hole).				*	*	*	*
6L70006P	WASHER: lock; SAE Reg. for No. 6 screw				*	*	*	*
6L72244	WASHER: lock; internal tooth				*	*	*	*
6L54012–2	WASHER: rubber; (0.905″–0.940″ diam; 3/8″ hole; 3/8″ thick).				*	*	*	*

34.12. Maintenance Parts List for Mounting FT–250–(*).

Ref symbol	Signal Corps stock No.	Name of part and description	Quan per FT–250–(*)	Running spares	Orgn stock	3d ech	4th ech	5th ech	Depot stock
	2Z8503–1	COLLAR: shock mount	4			*	*	*	*
	6L3108–32.4S	NUT: steel; hex.; 8–32	4			*	*	*	*
	6L6832–30.1P	SCREW: machine; roundhead; 8–32 x 1 1/8″; (parkerized).	4			*	*	*	*
	2Z8503	SHOCK MOUNT: rubber; 1″ diam	8			*	*	*	*
	2Z8503–2	WASHER: steel; (1″ diam; 0.171″ hole; 0.062″ thick)	8			*	*	*	*

* Indicates stock available.

35. List of Manufacturers' Names and Addresses. ***Rescinded.***

[AG 300.7 (25 Jul 44)]

BY ORDER OF THE SECRETARY OF WAR:

OFFICIAL:

J. A. ULIO
Major General
The Adjutant General

G. C. MARSHALL
Chief of Staff

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Two (2) copies to each of the following: T/O & E 2-25; 5-215; 6-165; 7-25; 9-65; 17-15; 17-25; 17-45S; 17-115; 17-125; 18-25; 18-35.

Five (5) copies to each of the following: T/O & E 2-22; 2-26; 2-27; 2-28; 5-216; 5-217; 5-627; 6-160-1; 6-167; 6-169; 6-329; 6-359; 7-26; 7-27; 7-29; 8-76; 9-66; 9-67; 11-7; 11-57; 11-107; 11-127; 11-237; 11-287; 11-587; 11-597; 11-617; 17-2; 17-16; 17-17; 17-19; 17-20-1; 17-22; 17-26; 17-27; 17-29; 17-37; 17-46S; 17-47S; 17-49S; 17-56; 17-57; 17-116; 17-117; 17-126; 18-26; 18-27; 18-28; 18-36; 18-37; 44-76; 44-77

For explanation of symbols, see FM 21-6.

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